

The American Bee Journal

DEVOTED EXCLUSIVELY TO BEE CULTURE.

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Editor's Table.

Hints to Beginners.

The pleasant weather of February and the cold and blustering spasms of March being now over, we may reasonably expect a pleasant April. But still, its proverbial "showers," which are said to "bring forth May flowers," accompanied with cold and chilling breezes (and in the North even snow) may be looked for. In the Northern latitudes, therefore, do not be in any hurry to set bees on their summer stands. To err on the side of *delaying* to remove them from their winter quarters, will be by far the most pardonable. Keep the temperature of your winter repository as low as 50 deg., if possible; and if you can do so, the latter end of April or first of May will be quite soon enough to remove them.

After their first flight they need no ventilation, and the entrance should be contracted—leaving only about an inch opening. Contract the brood chamber, so that the bees can cover all the frames. If mats are used, let them be put down snugly on the frames, to economise the heat.

If you find a colony without brood, it is probably queenless. Give such a colony a frame of brood from another hive, or unite it with a weak colony that has a good queen.

If you find a weak colony infested with robbers, sprinkle flour on them, and if they belong to a strong colony, exchange places with them. See that every hive has a queen, contract all entrances, and the trouble will usually cease.

Quickly dispatch all moth-worms, if any are found, as it may save a large progeny in the fall.


In the districts where willows, maples, and alders are plenty, bees will gather considerable pollen. As this is so important both for their own sustenance and the nourishment of their brood, if they do not gather it, give them access to flour.

There will now be a constant increase of brood in all healthy colonies, and consequently a daily increasing consumption of


honey. Should the supplies be running low, it will be necessary to feed them with honey, sugar, or candy, in order to stimulate them to breeding, as well as to save the existing brood from destruction, for when threatened by famine, bees will often sacrifice their brood. Water is also essential to them; where it is not accessible, it should be furnished to them, as they need it in the preparation of the jelly on which the larvae feed.

Care should be taken to prevent the bees from building drone comb in the brood chamber. If honey be the object of the bee-keeper, he needs a large army of workers to gather it, instead of a multitude of consumers.

Reports, so far, are that bees generally have wintered well, notwithstanding the unusual severity of the season. Those that were properly cared for will probably come out of winter quarters in good condition; while, as is ever the case, those that had an insufficient supply of honey, or honey of poor quality—uncapped, sour stuff—or those that were too weak in the fall, or queenless, will be the sufferers. If care is taken not to allow spring dwindling, the prospects for a good honey season are very flattering.

 Friend Alley, it seems, is on "a dog hunt," and sends us the following for publication:

The country is full of mad dogs. There are probably fifty persons in the State of Mass., who have been bitten by rabid dogs, within one year. No less than seven deaths have occurred in this State since May 9th, 1876. Most of these deaths were caused by the bite of what is known as the white spitz dog. The poison of their teeth seems to be as deadly as that of the rattle-snake. Beware of him. The question is this: Do any of the readers of the JOURNAL know of any cure for hydrophobia? H. ALLEY.

 We desire to have a report from as many as possible, for the year ending May 1st. It should be short and concise, giving the number of colonies, how wintered, and their condition at that date. Don't give us any coloring. We only want the bare facts and circumstances, to make a valuable table for future reference.

☛ The Hon. Judge George H. Wright, of Sioux City, Iowa, volunteers the following statement :

"I have kept bees in various places from Western New York to Western Iowa, for 25 years, and in that time I have taken all the bee papers and read the various authors on the subject of bee-keeping. For clear, concise and practical instruction, valuable alike to the advanced apiarist and the beginner, I cheerfully recommend THE AMERICAN BEE JOURNAL as *par excellent!* And I wish it that success which the energy of the publisher, coupled with the editorial ability it displays, so richly deserves.

Geo. H. Wright."

☛ Friend A. H. Hart made us a visit a few days since, and as he had a model of his Badger State Hive with him, he exhibited it in our office. Mr. H., has had nearly a half a century's experience and study of the subject, and is well posted in the art of keeping bees for profit. The hive can be worked in any way desired, from a nucleus colony in a hive of 2,000 cubic inches, to 12,000 inches and a mammoth colony. It can be run wholly for box or extracted honey, or for both as required. He adds to the original hive until he has it six times as large as at the first, giving room to prevent swarming and get a strong colony.

The following is his *modus operandi* :

"Begin in the spring with a swarm in a single standard hive, and stimulate early breeding until more room is needed, then take a right and left side off of two hives, and bring the two together, making 4,000 cubic inches. Hang a division board by the side of the combs, and to add frames or cards, move the division board until the room is filled. Then add another story on the top and arrange for box-honey and the extractor, or for long, low, broad chambers. If for box-honey, place one-half the cards in the center of the lower story, and the other half in the center of the upper story, which will leave a space on each side for a tier of boxes 24 in number; if run exclusively for box-honey, put sixteen more on the top by adding a super; or, to use the extractor in part, operate with the combs in the upper story. The boxes will be close to the cards."

☛ Many seem to think that they can write a letter, put in an envelope, not seal it, and send it for one cent. Of course it is forwarded, but when such come to us, we have to pay five cents on it. Nothing written except on a Postal Card, will go for less than three cents.

☛ We learn with regret that friend H. A. Burch has lost a workshop, two house apiaries and 163 colonies of bees by fire, besides the appurtenances of the business. He reckons his loss at \$3,000, with insurance of \$1,500.

BINGHAM'S SMOKER.—Friend Bingham has sent one to this office. It is similar in shape to the Quinby, but of larger tube, and heavier bellows. It burns any hard dry wood, and keeps it ignited. After laying it down five minutes, it has sufficient fire to start again. It is supplied with full instructions for use, and will be kept for sale at this office.

☛ A correspondent asks, "which is right—apiarian or apiarist—when speaking of a keeper of bees?"

We answer, the word *apiarian* is an adjective, and should be used only when relating to bees; thus—apiarian goods, apiarian products, apiarian supplies, etc.

An *apiary* is "a place where bees are kept; a stand or shed for bees;" so says Webster, who also asserts that an *apiarist* is "one who keeps an apiary." There can be no doubt, therefore, about the use of these words—the bee-keeper is an apiarist and not an apiarian!

☛ Friend L. J. Diehl has sent one of his hives to this office, which is described on page 131. Also an improved Quinby smoker, as made by him. It is provided with a double-curved spring and is fastened one on each side of the centre board. The bellows are made firm and durable.

☛ Mrs. Tupper was tried for forgery recently at Davenport, and upon the plea of insanity she was acquitted, and is now in Dakota on a farm. The "insanity dodge" is quite an institution for all kinds of misdemeanors now a days, and gets "many a one" out of trouble.

☛ Ill health has compelled H. N. Tennant to give up his honey-box business for the present. Therefore, let no one send him orders till further notice.

☛ Any one in Canada who has white extracted honey can find a buyer by writing to "W. G. Walton, 70 Vine St., Hamilton."

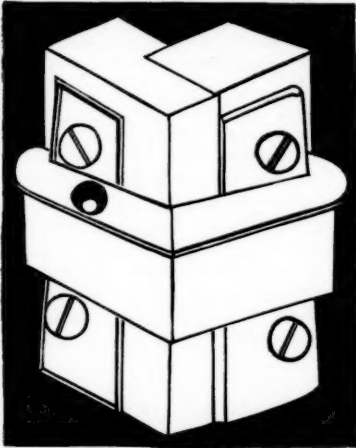
☛ L. C. Root wants us to ask who invented the round-pointed honey knife. Who will tell us?

☛ The Y. M. C. A. have established a free employment bureau at 145 Fifth Ave., Chicago. If any of our readers need farm hands, gardeners, nurserymen, dairymen, or boys, they can communicate with J. M. Hitchcock, the Sup't of the bureau, and obtain them.

Owen Co., Ky., Feb. 7, 1877.—“Dec. and Jan. were cold months with us; but our bees are doing pretty well so far. I commenced 1876 with 8 stocks; increased to 27, and got about 50 lbs. of nice comb honey. I wish some one would give their method of hanging frames, so that they will be true and an even distance apart. I would like to know how to hook frames together, as spoken of by the late Mr. M. Quinby, I believe, so that they will stand when the sides and ends of the hive are removed. Also how the hive is held together without nailing?”

G. W. JENKINS.

[If you will study this cut, you will see how Mr. Quinby's clamp is used for hives.



The same only smaller is applied to frames. They are strong, durable and work well. The two wedging pieces against which the sides draws have each two spurs cast on the under side, which drive into the wood before they are fastened, making them very firm. A hive properly put together with these clamps is nearly as strong as when nailed.]

Dyer Co., Tenn., Feb. 19, 1877.—“Bees did but little here last season. In the spring I had about 40 stands, increased 6, and got only 75 lbs. of comb honey. They are all wintering well; no loss as yet. Do bees always go West when they swarm? If so, why? Nearly all swarms here go west when leaving for the woods. I have two other small apiaries—12 and 18 stands respectively—that did no better than my home apiary. They increased a little but gave no honey.”

JOHN H. CHRISTIE.

[Much that concerns swarming is shrouded in mystery. Bees swarm incessantly, at unseemly times, or refrain from swarming altogether, but who can tell why? They “go West,” like some young men should, but their actions, if governed by laws, are unknown to man. If the woods are west of your place, that may explain it in your case. Ed.]

1. Is mellilot clover good for hay or pasture?

2. How high does it grow?

3. Will white clover or blue grass run it out?

4. When and how long does it bloom?

5. When is the best time to sow the seed, and must it be sown twice to be permanent and continuous?

E. J. THOMAS.

Linn Co., Iowa.

1. When mellilot is young and tender, stock eat it quite readily, especially sheep. But we do not recommend it for hay or pasture, but simply for honey purposes. It is, however, one of the best of fertilizers.

2. From 3 to 6 feet, with many side branches.

3. Never knew this to be the case.

4. In the latitude of Chicago it begins to bloom and yield honey about the 10th of July and continues thus till heavy frosts occur. Light frosts do not injure it much, if any.

The best time is in the fall, but it can be sowed any month of the year with perfect safety. Sow in the spring with oats, barley, rye, or wheat. By so doing the use of the ground, the first season, is not lost. The plant being a bi-ennial it does not bloom in general till the second year. After it blooms it then dies, root and branch. Whether you sow in the fall or spring, the land should be seeded again the ensuing fall, then you insure a continuous crop.

M. M. B.

“Is sugar as good as syrup for feeding in the spring?”

P. WILDE.

[We prefer to feed thin syrup, for water is also essential for brood rearing.—Ed.]

Shelly Co., Mo., March 2.

I have a few young swarms in new hives which have become infested with cockroaches. Please tell me, through Journal, how I can get rid of them. Do they eat the honey? or what calls them to the hive?

E. C. PHILLIPS.

[Of course they eat the honey. Expel them with your smoker, and kill them. —Ed.]

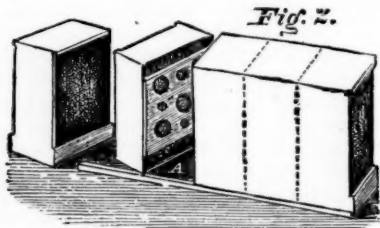
CATNIP SEED.—We have a nice lot of good clean seed of this honey-producing plant. Bee-keepers should see to it that such and other forage for bees abound in their localities.

W. G. Walton of Hamilton, offers an Italian queen from an imported mother to the one sending the largest number of subscribers to the A. B. J., before August 15th. Send on your clubs, now, and compete for this extra premium.

Sectional Honey Boxes.

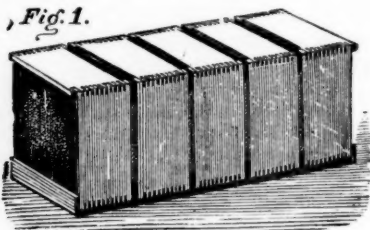
Many inquiries about sectional honey-boxes are now received, and we have requested friends Barker & Dicer to give us a description of theirs and their manner of using them, which is as follows:

The size now described is such as we use on our style of hives, but we make them of any size. The sections are made of two wide and two narrow pieces. The wide pieces are 6 in. long by $2\frac{3}{4}$ wide by $\frac{1}{4}$ thick. They are held together by means of grooves and tenons; one groove in the centre being cut $\frac{1}{2}$ in. deep or $\frac{1}{4}$ deeper than the rest for the ends of the guide-strips to rest in; they being 6 in. long, $\frac{1}{4}$ wide, $\frac{1}{8}$ thick.



When the sections are joined together for a large box, the wide pieces of one section are put next to the narrow pieces of the next section, thus forming an opening, $\frac{3}{8} \times 5\frac{1}{8}$ in. between each section, on all sides of the box.

The sections are held together by two pieces, 13 in. long by $\frac{1}{4}$ in. square, nailed lengthwise on the bottom, the other three sides being covered with paper. At each end of the box are two pieces, $5\frac{1}{2}$ in. long by $\frac{1}{4} \times \frac{1}{4}$ nailed on the bottom, which forms a chamber between the box and top of the brood frames. Between each section is a division, $4\frac{1}{4} \times 4\frac{1}{4} \times \frac{1}{2}$ in. thick, which is held in place by springing the diagonal corners against the wide sides of each section. We put 5 sections in a box (any number may be used) and 3 boxes to a hive; each box having a light of glass $5\frac{1}{2} \times 6$ in. in each end. When placed on the hive they rest on the frames and edges; the length of the boxes being across the frames brings the section the same way as the frames.



The object in reversing the sections is to form the spaces between them on all sides, so that divisions may be inserted if desired, and the combs be built straight in the sections. We find that the combs will be built straighter in these boxes without the divisions, than in our old style of boxes,

which have the sections tight-fitting on the sides. The spaces between the sections prevents them from extending the comb into the adjoining section.

When the boxes are not in use for storing honey they are turned bottom side up on the hive. When used for storing honey, turn over only one box at a time, using 2 or 3 tiers of boxes if necessary, to give the requisite amount of store room. Forming communication between the upper and lower tier of boxes by removing the paper from over the openings between the sections in the top of boxes. When more than one tier of boxes is used, we use a false rim the same height as the extra tier.

In the construction of boxes we combine both the advantages of a large and small box. They can be readily divided by simply cutting through the paper and the two long strips on the bottom, and when the openings are covered with paper they form a tight box, ready for shipping, without the trouble of handling small sections separately.

Several letters have been received making inquiries about Harden Haines, whose advertisement appeared in the A. B. J. He is a young man of limited experience with bees, but has started out to build up a business in selling imported queens. We have written to several responsible men in the town in which he resides, and their answers have given us the above facts. He has sent us a receipt for a registered letter which he has sent to Italy for bees. His hopes are large and he no doubt draws on his imagination for much of the success which he anticipates. We would not injure a young man endeavoring to start in a legitimate business, but we do think he has been rather premature in advertising before he has safely received even one importation.

☞ We will send a sample of a 2lb or 4lb, honey box, complete with glass, ready to nail, for 25 cents, each, postpaid.

☞ The bee-keepers of Maquoketa Valley, Iowa, have formed an association; and held their first meeting March 15.

☞ The Abbott Pocket Microscope, advertised on another page, is an instrument of great usefulness for examining flowers, seeds, plants, insects, etc. It is in a convenient form for carrying in the pocket and is thus ready for use on any occasion when wanted. We will send this microscope to any address by mail, post-paid, upon receipt of the manufacturer's price, \$1.50.

☞ The Western Illinois Bee-Keepers' Society will meet at Monmouth, Warren Co., Ill., on Tuesday, April 10th. All friends of the bee are cordially invited. Bring anything interesting to bee-keepers with you for exhibition. An effort will be made to get reduced rates at the hotels. A good time may be expected.

WILL. M. KELLOGG.

Our Letter Box.

Oneida, Ill., March 2, 1877.—“My bees are doing tip-top, up to the present time.”

WM. M. KELLOGG.

Moultrie Co., Ill., Feb. 20, 1877.—“Bees all right in this section, that were properly cared for. Nearly all others froze, or died with dysentery.”

A. P. GREEN.

Keokuk Co., Iowa, Feb. 19, 1877.—“Bees are wintering nicely; had ours out of the cellar a few days ago, let them have two days' fly; they enjoyed it very much and are now very quiet.”

S. L. VAIL.

Allegan, Mich., March 1, 1877.—“Our bees seem to be doing well. They are flying almost daily and working in meal for pollen.”

JULIUS TOMLINSON.

Traverse County, Mich. March 6, 1877.—“Please give, in next JOURNAL, Mrs. Adam Grimm's address.”

S. P. T.

[It is Jefferson, Wis.—Ed.]

Henry Co., O., March 5, 1877.—“I put 11 colonies in the house and set 34 within a foot of the fence, and 6 in. apart. I packed straw between and at the back of the hives. In some I put chaff in the top story, and only lost one, which was queenless. All the rest are in good condition.”

GEO. A. VAN HORN.

Vernon Co., Mo., Feb. 26, 1877.—“My bees have wintered better than usual; are breeding finely and have been so since January. I wintered on summer stands; have been feeding African spring wheat flour since the warm days commenced; they like it better than any feed I ever found; and, by the way, it is one of the best crops to raise I ever knew. It yields abundantly and makes good food for man or beast.”

GEO. H. MOBLEY.

Sauk Co., Wis., March 7, 1877.—“I took out of my out-door cellar 60 swarms (2 dead) on Washington's birthday. I then went to the woods and found a swarm of bees in a tree. This is pretty good, for 40 miles north of Madison, Wis.”

W. PORTER.

Portage Co., O., March 8, 1877.—“I commenced 4 years ago with one swarm. I now have 20 colonies in good condition. I winter in a dry cellar, with a little lower ventilation. Bees did well here last year. The JOURNAL is always welcome.”

F. P. CLARK.

Wayne Co., Mich., March 21, 1877.—“Two years ago I began with 3 colonies; last fall I had 12, besides all the honey we could use. Lost 3 swarms in the fall, before preparing for winter. I use the Thomas hive. Is it as good as any, all things considered?”

WM. MOORHOUSE.

[Opinions differ as to hives. Any hive that you are accustomed to, and can manipulate, will do. More depends on proper care than any particular style of hive.—Ed.]

Vernon Co., Mo., March 6, 1877.—“I put 35 stands into winter quarters. From 20 colonies last year, I extracted about 1,600 lbs., besides getting 300 to 400 lbs. of box honey.”

LE ROY GATES.

Abronia, Mich., March 11, 1877.—“I see in the report of the North-Eastern B. K. Association that my article in the A. B. J. was denounced by L. C. Root and others. I have read the report of that honorable body for something ‘new and valuable,’ but am compelled to conclude that it is another *startling proof* of the statement called untrue, and endorsed by the convention. The convention repeats the substance of my article on comb foundation, published more than a year ago in the A. B. J., and endorses it. Why do they not bring out their ‘new and valuable matter,’ instead of denouncing what others write?”

T. F. BINGHAM.

Oneida, Ill., March 7, 1877.—“In reply to M's question, I would say that I have not had my microscope long enough to be able to answer. Perhaps some of the older heads will answer. The month of Feb. was very mild and pleasant, bees could fly a good share of the time, but every day of March, so far, has been cold and disagreeable. On the 4th, the mercury went down to 4 deg. below zero, with nearly a foot of snow on the ground. It is well our bees are packed so snugly. On Feb. 21, I visited the bee cave at the river and found it the best place for wintering bees I ever saw. It is dug out of a sand bank; it is 48 ft. long, 13 ft. wide and 7 or 8 ft. high; plank walls and floor overhead, covered with one foot of sawdust, and the sawdust protected by a roof; double doors in the north end; about 6 ft. space between. It has a sand floor and a ventilating tube in the south end. It contains at present something over 200 stocks, which seem to be in fine condition, though we roused them up some while putting in things from the burning house, which caught fire and burned down while we were there.”

WILL M. KELLOGG.

New Orleans, Feb. 13th, 1877.—“FRIEND NEWMAN: Moon's World is *non est*. It seems that the demand for a bee journal in the South is not sufficient to support one, yet there are three in the North, and none in the South. Southern bee-keepers object to the Northern journals, because six months out of the year nearly one-half is taken up with wintering. This is true, and yet with all that is written, many loose heavily. Mr. Benton, in his essay to the B. K. Association of Mich., does not give much credit to bee-culture in the South. He should not call Tenn. the ‘Sunny South,’ for there is as much difference between Tenn. and La., as between Tenn. and Mich., and more. The thermometer passed the freezing point here only five times this winter. In Dec., twice, 29 deg.; in Jan., three times, 29, 24, 27 deg.; 27 deg. above zero was the lowest for 40 years until 1877. I can speak of the quality of honey only in La. We have white clover, same in every respect as in the North; swamp flowers yield a heavy honey, of a golden tinge and finely flavored; corn gives much honey and plenty of the very best pollen, color same as swamp, which is much lighter than buck-wheat, similar to poplar in Eastern Ohio.

Tallow-tree honey is the only dark honey I have seen here, and my bees did not gather it. It looks like molasses; it is not common here. Alder makes a fine colored honey, and in abundance; Japan plum gave some of the finest honey I ever saw. It blooms in Dec. and Jan. and yields honey and pollen every day while in bloom, unless there is rain or freezing; a light frost does not injure it. The willow gives much honey, has been doing finely for 10 days. The orange comes in during this month, and I will send some to you to taste. To get fine honey one must be in or near the orange section.

"Many have written me about the South. This is my reply: 'If you have a good honey-yielding locality and can winter your bees reasonably well, remain where you are. While bee-keeping itself will pay better, there are other things to consider. Society and politics are none of the best. By coming South in Oct. you may escape malaria for one year. Bring along your locks, for the negroes (though free) still linger around. The summers are long and more exhausting than in the North, but the heat does not rise above 95, and the nights are cool. When La. gets her social and political conditions elevated, and the old slave customs removed, and the U. S. Government build the levees, then the State of Louisiana will be the finest in the Union to reside in. No bee-keeper should move here until he first visits the country; some are delighted and others disappointed, yet very few of the latter. I could not be induced to return North to live, on account of the cold. As I look out of my garden and that of others, and for a moment compare things here and in the North. Bees gathering honey and pollen, young bees airing themselves, yours shut up and freezing; our beans and peas in bloom, grass fresh and green, peach and plum in bloom, etc. I can easily compare it here, same as May 20th in Ohio, and you out on the ice and snow. I saw some snow, but it could not touch this State (too pure).'" W. B. RUSH.

Grant Co., Wis., March 8, 1877.—"I see by the last issue of the A. B. J. that a writer thinks it is an advantage to have hens around his apiary. A friend of mine near here has some hives, and found the hens eating his bees. He says he watched them eating live bees. He opened some of them and found their crop full of bees. He killed many of his chickens in consequence.

JOHN MURRY.

[We should like to hear from others on this point. Has any one else noticed chickens eating bees?—Ed.]

Cincinnati, Ohio, Feb. 19, 1877.—"On the 10th inst., I overhauled my 26 stands of bees. They stand on my roof, protected in the same manner as they are in summer, *i. e.*, with a straw mat; only the second story was taken off, as usual, after the honey harvest was over. They have never given me 10 minutes labor since that time. All are acquainted with our severe and lasting winter. We had in Cincinnati 20 to 23 deg. below zero, several mornings. Now notice the result of my outdoor wintering:—Twenty-three stands had, on Feb. 10th, 1, 2 or 3 sheets with capped brood; two stands were numerous with bees, but I could find

no brood or queen; it was getting late and I may have overlooked the queens. One stand had a leaky cover, the inside of hive was wet and mouldy and the bees had dwindled down. A few weeks will determine its fate; if its queen is alive yet it may get through as well as the rest. If brother Novice would take a look at my apiary at the present time, he would be saved a great deal of labor and vexation another winter, or I should be much surprised."

C. F. MUTH.

Woodville, Miss., Feb. 13, 1877.—"The peach and plum commenced blooming 4 or 5 days ago, the elm about two weeks since, and the maple has been blooming for sometime. Within the last few days I have seen two kinds of very beautiful blooming trees which I never noticed before, I suppose from the fact that the flowers all open at once and fall very soon. These trees look very much alike and the flowers, to a careless observer, are exactly alike—both are scarlet, minute in several bunches, but one is pendent, the other sessile. Both seem to be common, but they grow high. The stamens and pistils of the sessile variety are not conspicuous, the others are very minute. A friend tells me bees work finely on the pendent variety."

ANNA SAUNDERS.

Knoxville, Iowa, Mar. 1, 1877.—"In May, 1874, I purchased two colonies of Italian bees. Increased to 8, including 4 that I bought. I kept them in my cellar without loss. In 1875, increased to 22, with enough surplus honey for my own use. They wintered in the same cellar, which is very dry, with the loss of two weak colonies. I commenced the spring of 1876 with 20 strong colonies, and increased to 57. I sold 4, and now have 25 in the cellar and 28 on their summer stands. We have had a very severe winter up to Feb. 1st; during Feb. the weather was mild and sunny. I know that the 28 colonies out-of-doors are all alive, for they have been carrying pollen from rye flour on the nicest days. Of course, these 28 swarms were the strongest, and were well supplied with honey. I may lose some of those placed in the cellar, from weakness or other causes. If it is desirable, I will report success next month, and also describe my hive, which is double-walled, but not 'back-actioned,' and costs me 50c. each, not counting my own labor in making and painting. Tell Mr. Heddon to go on, I like to read his letters in the JOURNAL; his head is 'about level.'"

A. M. CROSBY.

[Shall be pleased to have your report and the description of the hive you are using, as suggested.—Ed.]

Trumbull Co., O., Mar. 5, 1877.—"I report for 1876, 11 stocks. On May 1st most of them were good; 3 strong and 1 weak. I sold \$150 worth of comb and extracted honey at 30c. and 20c. retail, 25c. and 17c. to the store, 6 miles from here. Increased to 20; could have had 5 or 6 more, but returned them to other hives that had swarmed a few days before. Last winter I made a pair of scales out of some old carriage springs; they will weigh to an $\frac{1}{8}$ oz. I put a good stock on it in the spring, balanced it with bricks, then used weights. The most

gained in one day was 8 lbs.; there was some gain nearly all the summer. If they gained 1 lb. through the day, they would weigh 1 lb. less at sunrise. In Sept. I was taken sick and did not see my bees for 12 weeks, so I could not fix them for wintering as I wished. I got 6 put in the cellar, the others are on the stands packed with hay and chaff on top; they were all living a few days since. On fine days I take the hay from the front, and put it back in the evening. It has been a pleasant winter here, 5 or 6 below zero one or two mornings, was the coldest. We had plenty of snow, two months good sleighing, and fine during Feb. I live $2\frac{1}{2}$ miles from the Pennsylvania line and 10 miles north of 41 deg. latitude. Our chief dependence for surplus is white clover." J. WINFIELD.

Fremont County, Iowa, Feb. 13, 1877.—"I have been managing my bees on the improved plan for 5 years. I started with 5 stocks, and at one time lost 17 by dysentery, and now have 50 stocks, besides some that I am keeping for neighbors. Last season was a poor one for honey. We got a little surplus from the linden bloom, about the middle of August. Honey was an entire failure. Bees that are properly cared for are wintering all right, but those on summer stands will suffer loss. I have part of my bees in cellar and part in an out-door shed, well packed with straw, quilts over the frames and caps filled with fine hay or chaff. All are doing well. We have no trouble to sell comb honey at 25c. per lb., and extracted at 16c. to 18c. at home. We have an organization of bee-keepers in this county, which we look to for good results the coming season, but depend more on the A. B. J. than anything else. We lack bee forage here, as the wild flowers are mostly killed out; white clover and alsike failed, and buckwheat yielded but little honey." JOHN H. MARTIN.

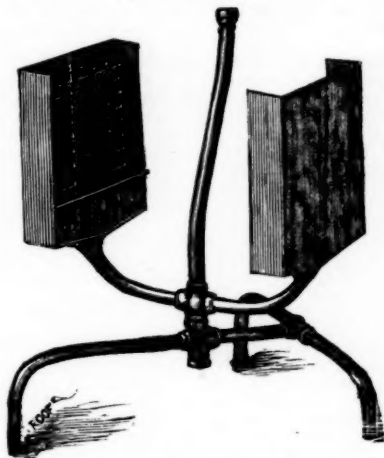
Cincinnati, O., Mar. 7, 1877.—"I wintered my 33 colonies on their summer stands without loss, and now that spring is putting in an appearance they are looking splendidly, with every promise of a good year." R. L. CURRY.

Nashville, Tenn., Feb. 10, 1877.—"DEAR EDITOR: I commenced the year 1876 with 22 colonies; took 1,000 lbs. of box-honey, and sold it at an average of 16c per lb. My bees also gathered enough honey to winter on. There has been more cold weather in Dec. and Jan. than I ever witnessed before. My bees, thus far, have done well. For the last 20 days the weather has been fine. On Feb. 1st my bees were gathering pollen quite freely, and have been ever since. The queens are laying more freely than I ever knew them to, in this month, before. My bees are carrying in water from a watering trough near the hives. The thermometer this morning stood at 32 deg. It has been frequently as high as 70 during the last 20 days. I have a colony of black bees that I got from the woods in 1870, and, having watched it closely, I am sure it has never swarmed since. It has raised 3 queens in 7 years. It stands near a poplar tree, fronting the east, and is no more shaded than other colonies and has been treated the same. It gathers 50 to 75 lbs. of honey a year. I have noticed my bees working in red oak

sawdust, where we sawed the green wood; they preferred it after it dried a little, then they rolled themselves in it and gathered, in their baskets, a dark gummy substance. When first I saw it I thought that they wanted pollen, and I offered them wheat flour, but they did not visit it. They may have gathered it for pollen, but I do not think so, as considerable natural pollen can now be gathered from the willows. What do the readers of the JOURNAL think about it? It might turn out to be a benefit to us. Success to the JOURNAL." H. W. ROOP.

Johnson Co., Ind., Feb. 8, 1877.—"I saw an advertisement in the last issue of the A. B. J., of Hill's gas-pipe extractor. I expect to buy one this season, and would like some further description of it in the BEE JOURNAL." J. H. JONES.

[The frame being made of gas pipe, that gives it the name. It is made wholly of iron and tin, and weighs but 12 lbs. This cut will give a good idea of it.



The comb holders are made of tin, with wires about $\frac{1}{4}$ an inch from the tin back, to keep the comb sufficiently far away from it to discharge the honey, and then it runs down to the bottom of these holders, and is carried by the pipe frame to the centre and there discharged under the frame. It has a crooked handle which serves as a means of whirling the holders of the combs.—ED.]

Jefferson Co., Ind., March 18, 1877.—"I have kept bees 45 years, and have 45 stocks now on their summer stands, in good condition. I use the Falkner hive, with 32 six-pound boxes. It is a good and durable hive. Our county bee convention is to take place on the 31st inst." A. WRIGHT.

Crystal Springs, Miss., March 14, 1876.—"My bees came through the winter in fine condition. On Feb. 1st, I found plenty of brood in nearly every hive, and on the last of Feb. I found many drones. The prospect is now good for some extra early swarms." J. W. MCNEIL.

Wayne Co., Ind., March 18, 1877.—“Bees did splendidly last season, and so far have wintered well and without loss. I have 25 colonies in Langstroth hives wintered on their summer stands, with straw on the top of the hive.”
WM. KITSON.

Barren Co., Ky., March 13, 1877.—“I went into winter quarters with 10 colonies in the Langstroth hive, upon their summer stands, with no protection, except the upper story of the hive being filled with straw. I have lost but two stocks, which I consider doing remarkably well, considering the excessive cold weather we have had. Bees commenced bringing in pollen about Feb. 10.”
E. G. MARTIN.

Springfield, O., Mar. 6, 1877.—“I have 35 colonies in good condition. They have been in a damp cellar during the winter, but I set them out a few days since, the weather being fine. I visited several apiaries last week, and most of the colonies are as yet in pretty good shape, but the weather is so changeable here, that we cannot tell what a few weeks may do for our pets.”
A. B. MASON.

Leaman Place, Pa., March 12, 1877.—“The past season was rather a poor one for honey, and nearly all the bees in this neighborhood have died of starvation. In Dec. and Jan. it was very cold; bees consumed all their stores and became weak. Feb. then coming in almost like spring, the few that were left commenced to breed very rapidly, to make up the loss and consumed what little honey was left. My bees are in good condition, and strong in numbers; I lost but one out of 34 stands, and that one became queenless. I united it with another. I wintered on summer stands.”
ELIAS HERSHEY.

Hadley, Ill., March 19, 1877.—“I have 160 stands, mostly pure Italians, in good condition, so far. They did well during the past season. I want to say to friend Alley, through the JOURNAL, that if he does not breed better queens than those he sent me, if he wishes, I will make him a present of one that will improve his stock. One of those that he sent me was dead, and the others raised nothing but drones of the blackest kind.”
F. SEARLES.

Barren Co., Ky., Mar. 10, 1877.—“My bees seem to be doing well, considering the unfavorable circumstances in which they were wintered—out on their summer stands without any protection whatever from the cold, which has been very severe. The mercury fell as low as 20 deg. below zero at one time. That was, I think on Jan. 9. I am manipulating 15 colonies; and I think for a man to undertake to manage bees without the assistance of the A. B. J., would be like a man traveling in the dark, he would be likely to fall at every move he made. We sometimes meet with men who are trying to manage bees with but little knowledge of the business, who refuse to take the JOURNAL, relying entirely upon their own judgment.

“I think they'd better quit in time,
Raising bees and honey;
Pitch their tent in another clime
Here they make no money.”

N. H. HOLMAN.

Henry Co., O., March 17, 1877.—“This has been a hard month on bees—alternate gales of wind and snow. This morning the thermometer is 4 deg. below zero, with 18 in. of snow on the ground. Three-fourths of the bees on summer stands are dead, and there is a loss of 2 to 5 per cent. of those in cellars from starvation.”
D. KEPLER.


Newton Lower Falls, Mass., Feb. 28, 1877.—“I have 10 colonies in box-hives, and are doing well. I intend to transfer them to movable-frame hives this summer. I purchased some of Mr. Coe, at the Centennial. The first I ever saw. Please give the best way of transferring them? How can I tell if any are queenless, and how can I find the queens?”
G. J. LONGFELLOW.

[Our friend should get Cook's Manual of the Apiary, or some other guide or textbook, where he will find the information he desires. We have so often given it, that we cannot find room for a repetition.—Ed.]

Boone Co., Ky., March 22, 1877.—“Bees never wintered better in this county than during the past winter. Stocks are healthy and strong, even in the old box hives that received no attention. The people are waking up to the importance of managing bees on intelligent plans. I know of more than a dozen men who are commencing the spring with the Langstroth hive, many of whom never saw a movable-comb hive until last summer. They are convinced that by having the Italian bee and good movable-comb hives and good management, bee-keeping does pay.”
J. T. CONNLEY.

Atchinson, Kan., March 22, 1877.—“In the spring of 1876 I had 38 colonies; increased to 68. Extracted 4100 lbs. and got 500 lbs. of comb honey; making a little over 121 lbs. per hive. The honey was gathered from basswood and heart's-ease. The yield commenced the latter part of June and lasted about 6 weeks. My bees are in the cellar in excellent condition.”
C. W. STOKES.

Lawrence, Ill., March 12, 1877.—“I have 82 colonies in my cellar; they are in fine condition, with but few dead bees. There is not a particle of mouldy comb or a mouldy bee to be seen. I put them in the cellar on Dec. 1st. The thermometer at one time went down to 32 deg. at the bottom of cellar, and 36 deg. in the top. So I put in a ventilator made of 2 in. water conductors, running it from the centre of the bottom of cellar up to the floor, then through a partition into another cellar, then up the stove pipe. In 30 hours after I put it in I raised the temperature 4 deg., the weather outside being very cold. The thermometer to-day is at 40 deg., and everything lovely. I always winter in cellar, and think there is no place like it. We have a foot of snow now, and still it is snowing. Some of my neighbors put their bees on their summer stands in Feb., and they are there yet. I pity the bees.”
J. LEE ANDERSON.

 We can supply Comb Foundation, or machines to make it, early tested Queens or Colonies, all kinds of Smokers, Hives or Extractors, Seeds or anything wanted by bee-keepers at the lowest prices.

Correspondence.

For the American Bee Journal.

Improvement of the Italian Bee.

Had time and health permitted, this reply to Ch. Dadant would have appeared before this. I will write as briefly as I can. In vol. 12, page 205, Mr. Dadant says his ideas differ much from mine. Let us see wherein and how much.

When I made the statement that not much attention was paid in Italy to the improvement of the Italian bee, I had no idea of lessening the merits of any one; I spoke, of course, comparatively. I never doubted but there were just as good and talented bee-keepers in Italy as in any other country; but is it the good and talented that breed, sell and export improved Italian queens? If Mr. Mona and others had paid as much attention to improvement as Mr. Langstroth and others have, there would not have been so many complaints about dark and impure queens; but in justice let me say, a dark Italian queen is not necessarily impure. Many, however, have thought so, from a want of proper knowledge of the origin and unstable character of them.

In order to show that I was somewhat justified in making remarks upon the backwardness of bee-keeping in Italy, permit me to give an extract from a letter written by one of Italy's talented men, Dr. Blomhoff; vol. 4, page 83:

"But alas, bee-culture is still greatly in the rear, in this country. Most bee-keepers have still no idea of the great advance made latterly in other countries, nor any conception of an improved system of bee-culture, founded on a rational mode of management. With few exceptions, they pay no attention to their bees, except during the swarming season. The swarms are hived and simply consigned to the care of Providence."

Now it was such testimony that induced me to say that Italy might with advantage come to America and take back improved Italian bees; as England had come here and taken back improved stock of her own breeds of cattle. As this reads in the *Bee-Keepers' Magazine*, where it was first printed, it is neither truth nor sense. Who is at fault I know not.

When I stated there were black bees in Italy, I had no unkind or selfish motive in view. I verily thought I was speaking the truth. Mr. Dadant says there are no black bees in Italy. Well, at the mouth of 2 or 3 witnesses, let every word be established. A. B. J., vol. 1, page 17, the Rev. George Kleine says:

"As early as the time of Aristotle the existence of the *two races* was known, and Virgil clearly describes the difference between them in the Fourth book of his *Georgics*. Varro and Columella also mention them; and at this day *both varieties* are met with in various parts of Italy. Mr. Deus, of Dusseldorf, found the orange-colored bees at Genoa, and the black in Nizzia. Spinola found *both kinds* in Piedmont, though the *common* bee was less frequent there than the *pure Italian*."

On page 213, same vol., we have an account of your German bee-keepers who

made a tour through Italy, the writer says:

"On our arrival at Nizzia we were mortified to find only the *common* bee prevalent there. We were also repeatedly assured that the *common* kind only was found in the Kingdom of Naples and in the warmer districts of upper Italy."

Vol. 3, page 31, Von Siebold also believed that two kinds existed in Italy. He says:

"The statements which Varro and Columella have made upon bee-keeping, show that in Italy the gold-colored or variegated bees, and the unicolorous blackish-brown bees, occur together."

Vol. 8, page 86: Mr. Dadant was in Italy as late as 1872, he writes, "Sartori says that there is some black blood mixed with the Italian on the frontiers of Italy." Again, on page 87: "Sortori, who was born in the Tyrol, says that he does not understand why Uhle, who raises queens for sale, established himself in the Tyrol were the bees are as *black*, and as cross as hybrids." Same page, Mr. Dadant makes this remarkable statement: "I am now wondering why Mona wrote that all the bees of the Italian peninsula were pure Italian, when he ought to have known that there were such enormous differences in their color and character."

Now, is the above testimony sufficient to prove the truth of my statement? If not, then the witnesses must be impeached.

That the Italian bee is a variety, none, I think, will deny; but that it is a fixed variety, few will admit. Most of the intelligent German bee-keepers, and our own respected Langstroth, say it is not. Mr. Dadant's own experience, in his reply to my article, shows it is far from being very reliable. I have never seen a queen that would duplicate herself for any length of time. Indeed, there are few that have failed to see and lament the want of uniformity in their stocks. It was this that led me to look around for a cure, and I came to the conclusion that the improvement of our drones would, in a measure, in time remedy the defect. Why not? The males of all animals, the human being included, exerts a powerful influence on their offspring. Is the bee an exception? I think not. Mr. Dadant himself recognizes this principle in vol. 4, page 220, when he says:

"Furthermore, the best queen-breeders in Italy, living at the foot of the inaccessible Alps, cannot meet the light color so fashionable in Germany. Their endeavors in this direction are always frustrated by the drones of their neighbors."

I agree with Mr. Dadant when he says that the matter of color can be overdone. I thought I was well guarded and plain enough to be understood, when I said the careful breeder can easily avoid this (too close breeding) by exchange or new importation. A noted poultry breeder of this country says: "There is but one way to reach uniformity in breeding, no matter whether it is horses, cattle or fowls, and that is by 'in-breeding,' and like poison it may kill or cure us just according as we display good judgment in its use."

I did not mean to be understood as advocating color at the expense of any other good quality. I distinctly said that it would be an advantage if we could work for (or keep up) all other points at the same time. It would indeed be very unwise to let any point run down, in order to obtain

another of less importance. I fully agree with Mr. Dadant, when he says: "that bees are not only kept for color but for their qualities as honey gatherers."

I gave prominence to color in the drone, because it is a subject little spoken of and less practised in breeding, and I was satisfied that by using our best-colored drones it would have a tendency, in some degree, to fix the markings of a very unstable race. It was this drone subject that formed the burden of my article, and the only point that he failed to notice. Again, he does not concur with me when I say "that queens are *always* prolific enough when the conditions are all right." I do not think Mr. Dadant shows a very commendable accuracy in making this quotation. I said, "As a rule queens are prolific enough;" and I know many old bee-keepers who think so too, and as soon as an unprolific queen is discovered she is as soon as possible replaced by a better.

In conclusion I would say if any one works for prolificness in his queens, energy and mildness in her workers and color for all, he is on the right track. How much do we differ? I hope from the above I shall be better understood. GEO. THOMPSON.

For the American Bee Journal.

Our Resources for Honey and Pollen.

We have several varieties of the willow, the earliest one beginning to bloom as soon as the weather becomes warm in the spring; even in winter, during a warm season, it will commence to bud. Willows are in bloom here from the beginning of April till the middle or end of May. They yield an abundance of pollen. Some honey is gathered at the same time from the bloom of elms or soft maple.

Sugar maple comes next, but there is not much in this vicinity.

White oak and similar trees are abundant here. Last year I found my bees getting pollen in large quantities from the tassels, 1 to 2 inches long, that hung in bunches on the oak. It was of a brown color.

From the apple bloom bees gather considerable honey, of a fair color and medium quality.

Red raspberries bloom in the latter part of June, and give honey for some time. It is clear and the quality good.

White clover is abundant here nearly the whole season, but bees work on it very sparingly.

Motherwort and catnip blooms for a long time, and bees work on it from early morn till night. It is not plenty here.

Thorns of various kinds are abundant, and are covered with bees when in bloom.

Mustard makes excellent pasturage. By sowing both black and white mustard in the spring, and some later, it produces good pasturage for some six weeks. The white blooms first and lasts about 15 days; then the black comes (about July 1st) and lasts about a month. Bees work on the white all the forenoon, and on the black nearly all day.

Basswood (linn or linden) is plenty and blooms from July 10 to 15, lasting 8 or 10 days. From this we get our largest yield and best quality of honey.

Red and alsike clover bloom about the middle of June, and last 15 or 20 days, until

it is cut. Neither of them yield much honey here.

Corn tassels produce pollen. Pumpkins and squashes produce considerable honey.

Golden-rod is plenty, and yields a little honey here for a long time.

Buckwheat yields honey in the forenoon during August.

Wild flowers also yield honey to some extent here. S. K. MARSH.

Ionia Co., Mich.

For the American Bee Journal.

Winter Transferring.

On Jan. 4th, I was asked by a friend if I would like to cut a bee tree. Of course, I was delighted to hear of such a treat. On the next day I went to his house, situated in the centre of the city. I took a hive with some empty comb, and he informed me that the bees were in the next house to his. It was very cold, and they could not fly. I found them between the plaster and the siding boards. I took off some of the siding boards, which exposed the bees and comb to view. I carefully cut out each piece of comb and shook the bees into the hive, and gave my friend the honey, as I only wanted the bees to experiment with. On the second comb I found the queen and some brood. I put this piece with queen and all the bees into the hive, and placed them in the cellar the same night. I then fastened the piece of brood into a frame, the same as transferring in June, and gave them some cards of honey and pollen, and a week ago I had them out for a fly and found them in splendid order, and the queen laying.

W. G. WALTON.

Hamilton, Ont., Feb. 19, 1876.

For the American Bee Journal.

My Experience with Bingham Hives.

Many ask: "How long can bees live in a healthy condition, shut up by cold weather?"

Some of ours were under snow 3 ft. deep. We had near 100 swarms put away for winter, all on their summer stands but 4, which were in the cellar. All came out, so far, in good order, except one in a box-hive that smothered by—well—carelessness, that's the truth of it. I covered a board sloping over most of the doorways to keep the snow and wet out, but neglected that one. I pack with chaff. I use the Bingham hive mostly; have a few Langstroth, some single, some two-story, and 3 old *barns*, I call them—deep hanging frames.

I prefer the Bingham hive. It is a complete hive, and not as a writer in the A. B. J. says, "three little sticks," etc. I use it the way it was meant to be used by Mr. Bingham. It is the leading hive in Allegan County. Its chief advantages over the Langstroth are: 1st.—It is much easier to manipulate in every way. 2nd.—It is much safer to winter in on summer stands. 3d.—It is more likely to produce a good average yield of honey, either large or small apiary. 4th.—It is less liable to get "millered up."

As the whole set of frames are clamped together, by taking off the wire clamp at each end, leaves is free to be opened in the middle of the hive or anywhere, without

crushing the bees. It is also very convenient to set a nucleus, by simply taking the front and back off the inner hive, and set them up with as many frames as desired between them.

It is very convenient to "pile" or "sling," as one set of frames can be set on top or under another set, or can be taken off and put on honey boxes.

It has an outer case with plenty of room to pack around the frames, as well as over and under, and double entrance, too.

The honey boxes set close over the brood chamber, where they should be.

There is no spot a worm can hide inside, not readily accessible by the bees; as under the ends of frames, or between frames and surplus boxes in Langstroth hive.

My best swarm in the Bingham hive gave 14 boxes full—5½ to 6 lbs. in a box—and several scraps and spare frames of brood. My poorest—a late nucleus swarm—nearly filled their hive, by being helped some with comb and brood. My best in the Langstroth gave 5 boxes full and 1 scrape. My poorest gave nothing, and eat 4 frames of honey.

The honey season was the poorest ever known here.

JOHN O. SHEARMAN.

Allegan Co., Mich.

For the American Bee Journal.

Natives vs. Italians.

I find in the last issue of the JOURNAL an article from friend Miller on the respective merits of native and Italian bees. I think his comparisons prove nothing from the fact that several miles interview between his apiary and those he compares with; for as we all know that 4 or 5 miles makes nearly as much difference in the value of an apiary as in that of a farm. Allow me to state a few facts and then people can draw their own conclusions.

When I first came to this place, 14 years ago, I purchased 8 stocks of native bees and a lot of Langstroth hives; but after trying 3 years, I sold my hives to a neighbor who was meeting with success, and I had three stocks in box hives as the result of my enterprise.

In 1868 I determined to try the Italians, and obtained of M. S. Snow, of Hanover, one stock, by express, which was so much injured by the agents' careless handling that they did not swarm that season. In 1869 I purchased of Mr. Snow five more, so I commenced the spring with six rather light stocks, while a neighbor about 80 rods from me had 30 stocks, and was considered the bee man of the town. I was surrounded by ten others who had from 1 to 4 times my number, so you see it was impossible to keep pure Italians.

Now for the result. In this part of the country 1869 was a cold, wet season. I did not feed any until autumn, and my first swarm came off just three weeks earlier than my neighbor's. Neither of us got any surplus honey. My 6 increased to 13; his 30 increased to 37. The next spring I had 13 stocks of Italians, but one proved to be queenless, and 2 of the 3 stocks of black that I had left, died. My neighbor commenced the season of 1870 with 30—his original number. In 1870 and 1871 my first swarms issued about 5 weeks earlier than his first. At the end of the third season I had more bees and surplus honey than this

neighbor. It will be remembered we were side by side, only about 80 rods apart, and he experienced; I not experienced, and a failure with native bees. To-day there are not 80 stocks of bees within 3 or 4 miles of me.

I admit that friend Miller for the past two seasons has been more successful than me. But let us look at the subject a little. He tells us that long before I commenced with my 6 Italian stocks he had 50 blacks (I understand he had at one time 100), and in the fall of 1874 I had 124 stocks, while he had only 27. He makes a slight mistake in the next statement. I sold 4, put about 60 in cellar and the others (except one in double-wall hive) in bee-house with 4 in. walls filled with tan bark. The winter was extremely cold, and cellar contained frost a long while, and the house was frosty nearly all the winter. When I took them out in the spring, 8 or 10 stocks were quiet, but most of them seemed to be strong in bees, and as we had splendid weather the first part of April, I thought they were all right, but those who read "Sad History," in the June number, 1875, will remember the result. I have a theory which I think accounts for it, it is this: The cellar and house were so cold up to about the time of putting them on their summer stands, that no young bees were raised, and the old bees became so diminished during the warm weather that they were unable to withstand the cold that followed. One neighbor lost all he had; another thought he had wintered 30 out of 32, but finally came out with 12. I had but 42 that were good for anything; 40 lived through the summer, but only 26 gave any surplus, from which I got a little over 900 lbs. of box honey. I think Mr. Miller's bees must have been in much warmer quarters during winter than mine.

We see from reports in the JOURNAL that location makes a great difference with surplus honey. The past season in some localities was the best, and in others the poorest for years. Mr. Miller says that June was splendid, while only 15 miles west the ground was parched with a drouth and bees did nothing until about July. We had a light rain on June 27 which made the parched fields put on a green appearance, and set our pets humming, and on July 4, we had a splendid rain which helped so much that from 50 stocks I got 1200 lbs. of box honey, although in June it looked as though I would get none. I think one needs two hands to run an apiary for extracted honey, and as I have lost the use of my right hand, I shall have to stick to the boxes, but I would like a cheap extractor to extract honey in the combs of partially filled boxes, if there is one adapted for that purpose.

H. B. ROLFE.

For the American Bee Journal.

Bees of the same Colony Fighting.

On page 47, February number, R. C. Cameron makes a statement of his experience in this matter, and Ch. Dadant says in answer that he never knew of bees of the same colony fighting each other. I have known of many such instances and will give the reason. Queens should not be handled at any time, if it can be avoided; as they are liable to contract an odor from the hand, and sometimes from the cage,

that their own bees mistrust the queen not to be theirs, and kill her; and all bees that have come in contact with her are liable to be killed also. Bees sometimes receive an objectional odor while out at work from the hives; on their return they are set upon by the bees and killed, and in turn the ones that come in contact with her are also killed. During the confinement of a caged queen, a fertile or other worker may have been acknowledged, and a fight of factions may have taken place on being liberated; of course the perfect queen would be the favored one kept.

A number of workers may have received an odor from the strange queen or cage, and be killed by others, thinking them to be strangers, from the odor of the queen or cage, or the poison pressed out on them if any tight clustering was done. A virgin queen, or one not fully laying, will sometimes kill bees that come to her with hostile intent. I have seen a queen kill a handful of such bees. A queen can, and sometimes does, kill more bees in one minute than two workers can. Why? She is stronger, quicker and more perfect than the workers. Her sting is already curved, saving time.

REMEDY.—Feed largely of highly-scented feed, until subdued; or take away their stores, smoking and scaring them. Then return the stores and they will be under control.

J. M. MARVIN.

St. Charles, Ill.

For the American Bee Journal. Italian Bees.

A correspondent (P. Miller) in the March number of the JOURNAL gives his opinion that the Italians are not better than the black or native bees. His opinion does not agree with most of those who have had them. I do not understand that Mr. M. has tested them himself, but has taken other peoples' word and management for it. The facts which he gives proves nothing either for or against the Italian bee.

I have charge of a few colonies that are situated some miles from where I live. Not having time last fall to prepare them for wintering on their summer stands they were left to get through the best they could. They are all Italians but two stocks. The last time I saw them, all the Italians were alive and in good condition while the two black stocks were nearly all dead. The black stocks were fine ones in the fall and were well stocked with bees and honey, in fact they were as good as any stocks in the lot. Last season the Italians did much the best in storing honey in boxes.

Now, I claim that the Italians are much the best in many very important respects. It is well known that they are not so cross as the blacks, and that fact alone should make them more valuable than the natives. They are much easier to handle than the blacks in any operation. I know from experience that the Italians will gather enough to live on through the winter, when the blacks won't, even with the same chance of doing so; thus proving that they will work upon flowers that the blacks pass by or cannot gather honey from. Neither is this all the claims they have over the black variety. They are much more beautiful to look upon, and one can go much nearer the hives to watch them at work

than to the hives of black bees. What looks more beautiful and pleasing to the eye than a hive filled with new white comb and honey and a full stock of pure (yellow) Italian bees? Such harmless pets are much the best to have, rather than the cross blacks that one can't go near without being stung. We never found any more trouble in wintering the Italian than we have the blacks, in fact we have no trouble at all, so far as the bees are concerned.

A LOVER OF THE ITALIANS.

For the American Bee Journal. Comb Foundation.

While at Shreveport last year, in charge of my bees, there Mr. Perrine paid me and my brother a visit, and remained about a week. He brought with him a few samples of comb foundation—most of it being made of pure wax and the balance of both wax and paraffine. We quickly used up these samples in divers experiments, and then telegraphed to Chicago for 10 lbs. of yellow and 2 lbs. of white wax. Being delayed somewhere on the route, it did not reach Shreveport till after Mr. P. went away. It was arranged, however, that we should get the foundation as soon as it arrived, and use it up in experiments, and then report the result. It was to be used as follows:

1st. By filling the frames and section boxes nearly full, leaving a space of about $\frac{1}{8}$ in. at the bottom, and $\frac{1}{4}$ in. at each end. This was to allow for stretching and expansion, so as to guard against bulging.

2nd. In strips of various lengths and widths, all the way from $\frac{1}{2}$ to 3 in. in width and from 1 in. to full length of frame or section, when used in short pieces, one or more to be used in each frame or section.

Without detailing the experiments, I will give some of the results:

When frames were filled nearly full of foundation and hung between natural comb, they were quickly built out and occupied with brood. The combs were even and nicely built, and free from drone cells. But we did not think it would pay in the South, where comb-building appears to be more rapid than in the North, to give \$1 per lb for foundation and fill the frame full. At 75 cts. per lb it might pay, and I should be strongly inclined to use it at 50c. to 60c. per lb. I found the yellow wax better every way than the pure white. The foundations made in part of paraffine are of little value, as they stretch and otherwise get out of shape too much.

The foundation is truly valuable when used in strips or short pieces as starters. In the large frames I found it better to use three pieces about 2 in. long, than one strip the whole length. By using three pieces the bees will generally start their combs in three places, this is a great advantage in getting straight combs. The middle piece should be as near the centre of the frame as possible, and the others from 2 to 3 in. of each end. The pieces should be about 3 cells or $\frac{1}{2}$ in. wide. Were I to use long strips for swarms, should want them from 2 to 3 in. wide.

For section boxes, one piece in the centre, about 2 in. long and $\frac{1}{2}$ in. wide, is better than 2 or 3 pieces, each 1 in. long. The piece in the centre indicates to the bees just where to commence, and the combs are

built much better than when 2 or 3 pieces are used. This piece may be cut the shape of a triangle, say 2 in. long and $\frac{3}{4}$ in. wide at the point. I used natural comb as starters in the majority of my section boxes, but would have preferred yellow foundation. In fact, I would rather pay \$1 per lb for the foundation starters than use the natural comb free of cost. The foundation starters can be put directly in the centre of the frames, but this cannot be done so accurately with natural comb. I find no objection to the color of the yellow wax starter, as the bees quickly bleach it to a snowy whiteness.

The best way to fasten the starters or foundation to the top-piece, that I have tried, is to lay it down flat with one edge very near the centre, and then crush down one row of cells to the wood with the end of a putty knife; a common case knife will do nearly as well. To keep the blade from sticking to the wax, wet it frequently by dipping it in honey. This must be done in a warm room or place. When mashed down, run the flat side of the blade back and forth along the pressed wax, and it will adhere to the wood as firmly as you may wish. Now lift up the other edge of the guide until it hangs in its proper place. A boy or girl will soon learn to fasten the starters in quickly. M. M. BALDRIDGE.

St. Charles, Ill.

For the American Bee Journal.

My Mode of Preparing for Winter.

By this day's Express, I send you a hive of my own invention, and a smoker. I send them to you, so that the many bee-keepers who call at your office may examine and give their opinion of them. I have been questioned much concerning the hive, and its construction and adaptation to wintering bees. I have not lost a single colony of bees as yet in this hive, in 5 successive winters. If my method is fully carried out, there is no need of losing a single colony. I double up all my small or weak colonies and make them strong, then I provide passages through all the combs, so that the bees can have access to their stores. The hive is so constructed that the back end of the frames do not come in contact with the back of the hive, and for fall management, or preparing the colonies for winter, I open the back door; after the removal of honey-boxes, I take a blanket and drop it down to the bottom of the frames, then fold it over the top of frames. I also remove all of the combs that the colony does not cluster between. This preparation for wintering should be performed after three or four hard frosts, which compact the colony; then it is a small matter to perform the work.

After removing the spare combs, I drop in the movable division-board and pack the empty space with straw or hay; tuck the blanket down tightly, so as to avoid all draft of air through the brood chamber; place the surplus boxes on top of quilt, and put on the cover. If the entrance has been enlarged to the full width of hive, place the entrance board so that the colony has but two holes for ingress or egress. This is fall management. The colony needs no more care until winter has begun in earnest. In the Northern States it commences about the

1st of December, then if the colonies are to remain on their summer stands, the lower passage should be contracted to only one hole, which is in my hives about 2 in. long and nearly $\frac{1}{4}$ in. high. Open the upper entrance in front. This allows all foul air to pass off without giving a direct current of air through the brood nest. In case of protracted cold weather there is no danger of the bees becoming covered with ice or frost. In case the bees that drop to the bottom fill up the lower entrance, the colony is in no danger of being disturbed or smothered.

For wintering in cellars, instead of leaving the upper entrance entirely open, only turn the perforated end of the tin over the entrance, so as to exclude mice, reverse the entrance board and close it down to the proper height.

My hives are made with and without bottoms, just to suit the fancy; I prefer them without. I have wintered bees successfully both in the cellar and on summer stands, but prefer to winter on summer stands.

Last season was a poor one for honey. I commenced the season with 32 colonies, and increased to 67. I have taken 1,500 lbs. of honey, besides raising 72 pure Italian queens. In 4 years I increased from 4 to 67 colonies, all in good condition at this date, except 6 which perished for want of care while I was absent from home. I was absent from the early part of winter to Feb. 1st.

The smoker is one of my own make, but not of my invention; that honor belongs to Mr. Quinby. I think it a much better article than his. L. J. DIEHL.

Butler, Md., Mar. 4, 1877.

For the American Bee Journal.

Weather Report in La.

I give here our temperature for February. All can see how even it has been. We always have a breeze, and unless marked with v. s. or s. or m.,—very strong, strong, moderate—it is only a breeze.

Day.	7 A. M.	12 M.	6 P. M.	Wind & rain.
1	58	75	65	S. E.
2	58	75	65	S. E., m.
3	52	55	53	N., s.
4	50	53	53	
5	52	62	58	N., s.
6	48	62	52	N. E.
7	47	62	60	N. E.
8	48	62	55	N., m.
9	48	62	55	N.
10	48	62	55	N., s.
11	50	68	58	N., m.
12	50	68	62	E., v. s.
13	55	60	55	N. E., m, rain
14	53	53	53	N. E.
15	50	52	50	N., s.
16	45	47	49	N., v. s.
17	45	50	50	N., s.
18	38	52	52	N. E.
19	45	66	62	N. W.
20	38	52	52	N. E., s.
21	46	54	52	E., $\frac{1}{2}$ rain.
22	48	55	52	N. W.
23	46	55	50	S. W., s.
24	42	53	53	S. W., m.
25	44	55	52	N. E.
26	42	52	50	N., m.
27	46	56	53	N. E.
28	50	60	56	N. E., s.

New Orleans, La.

W. B. RUSH.

North-Eastern Bee-Keepers' Association.—Tabular Statement of Operations for the Past Season.

SUCCESS IN WINTERING.				SUCCESS OF THE SEASON'S OPERATION.										
NAMES.	No. of Stocks		Where Wintered and the Average Temperature.	Manner of Wintering briefly expressed.	No. of Stocks			Name of Hive.	Number and Size of Frames.	Am't of honey produced		Principal sources from which honey was gathered.	Average value of the honey season.	Amount of sugar fed, fall, 1876.
	Spring, 1876.	Fall, 1876.			In fall	Italians.	Blacks.			Box.	Extracted.			
C. B. Isham	60	53 m	Out-doors	Large hives packed in straw	60	53	Slide Boxing	8 frames, 17 $\frac{1}{2}$ x 10 $\frac{1}{4}$	3,600	300 15	10	Berry clo. lin. bk w.	Ord.	
D. H. Van Alstine	45	41 m	In cellar, 38	See fig. 2	41	72	Convenient	8 fr. 11 $\frac{1}{2}$ x 15 $\frac{1}{2}$	6,200	386 10	10	W. clo. lin. buck w.	Good	
D. E. Floyd	58	54 m	In cellar, 46	No preparation	54	77	Convenient	8 fr. 11 $\frac{1}{2}$ x 15 $\frac{1}{2}$	1,510	300 10	10	Willow & do.	Good	
John Floyd	24	21 g	Out-doors	Figure 3	24	35	See fig. 4	6 fr. 18 fr. 10 x 18	2,600	1,200 15	5	Berry clo. lin. bk w.	Ord.	
F. H. Cyrenus	60	60 g	Cellar, 42	Quilt over frames	60	90	Langstroth.	10 fr. 8 $\frac{1}{2}$ x 17	300	700	5	64 Clover, buck whit.	Good	
F. L. Scofield	62	53 m	House, 40	Close top, ventilate 4 sides	62	90	Union	8 fr. 10 x 17	6,750	1,340	100	Clover, linden	Ord.	
M. H. Tennant	132	122 m	Cellar, 48	Figure 5	132	104	New Quinby	7 fr. 11 x 19 $\frac{1}{2}$	4,000	6,000	50	Clover, linden	Ord.	
L. C. Root	100	67 m	Part Cellar, 42	Fig. 7	102	106	Gallop	9 fr. 10 $\frac{1}{2}$ x 15 $\frac{1}{2}$	2,994	326 25	50	Basswood	Poor.	25
G. M. Doolittle	37	28 m	Cellar, 42	Pillow on fr., entrance open	46	79	New Quinby	6 fr. 8 fr. 11 x 15 $\frac{1}{2}$	1,600	150 10	20	W. clover, bass w.	Poor	
E. D. Clark	45	40 g	Cellar, 35	Board on top, sealed up	35	79	New Quinby	8 fr. 11 x 17	2,500	15	15	W. clo. bass, gol. red	Ord.	
E. F. Wright	42	40 g	Cellar, 42 to 45	Quilt on frames	40	50	King and Langstroth	8 fr. 11 x 17	2,700	200	42	W. clo. buck whit.	Poor.	
C. D. Jones	48	42 m	Out-doors	Quilt on frames	42	77	Farmer's find	13 fr. 9 $\frac{1}{2}$ x 11	1,734	200	10	Berry bass, buck w.	Poor.	
C. E. Lloyd	65	50 m	Cellar, 40 to 45	Open top and bottom	50	73	New Quinby	8 fr. 11 x 17	2,000	350	10	Basswood	Ord.	
Dr. A. H. Marks	35	35 g	Out-doors	Quilt on frames	35	50	Langstroth	8 to 11 $\frac{1}{2}$ x 11 $\frac{1}{2}$ & 11 x 11	900	800	10	Basswood	Ord.	
A. J. Tiffany	20	19 g	Out-doors	Straw mats, holes in comb	19	35	Langstroth	8 and 9 fr. 10 x 19 $\frac{1}{2}$	2,000	200	30	W. clo. linden, buck w.	Poor.	
D. L. Betsinger	21	19 g	Out-doors	Carpet on fr., straw in cups	87	121	Langstroth.	8 fr. 10 x 19 $\frac{1}{2}$	60	12	10	Basswood, wild flows	Poor.	
Geo. W. Battley	87	87 g	Beginner	Fig. 9	27	51	Langstroth.	8 fr. 10 x 19 $\frac{1}{2}$	800	800	10	Clover, basswood	Poor.	
W. V. Bosworth, Jr.	27	29 g	Warm Cellar	Fig. 9	29	51	Langstroth.	8 to 11 fr. 11 $\frac{1}{2}$ x 11 $\frac{1}{2}$	4,000	10	10	Clover lin. sumac	Poor.	
Daniel Marsh	177	167 g	Bee cellar, 44	Various methods	3	6	House Impr'd	8 and 9 fr. 9 x 17	94	132	10	Sweet & wh. clo.	Poor.	
W. A. House	3	3 g	Out-doors	Cover packed with straw	124	204	Betsinger Imp	8 fr. 9 x 17	4,000	200	20	Basswood, tensle	Poor.	
J. P. Gardner	212	165 m	75 in. Ho., 42	Fig. 10	165	200	Langstroth	10 frames	200	200	20	W. clover, linden	Poor.	
N. N. Betsinger	7	7 m	Cellar, above 32	Fig. 10	7	10	Langstroth	8 fr. 9 x 17	3,423	630 17	10	W. clover, buck w.	Poor.	
C. P. Cowles	130	118 m	Winter B Ho., 38	4 to 6 in. chaff on frames	80	150	Green's	8 fr. 9 x 17	48	394 5	12	Basswood	Poor.	
R. Bacon	27	18 g	Out-doors	Little upward ventilation	18	26	Sasson's	10 fr. 12 $\frac{1}{2}$ x 19 $\frac{1}{2}$	8,456	1,200 10	10	Clover, bass, buck w.	Fair.	
J. A. Burdick	100	130 g	100 in. cellar, 35	Double-wall hive no top ven.	130	230	Double wall.	8 fr. 11 x 13 high	8,456	1,200 10	10	Clover, bass, buck w.	Good	
Julius Hoffman	48	32 w	Out till Jan. 6.	Cellar, no protection	42	64	Old Quinby	8 fr. 11 x 19 $\frac{1}{2}$	2,144	8,550	8	8 fr. 11 x 19 $\frac{1}{2}$	Good	

EXPLANATIONS.—Figure 1.—m, medium; g, good; w, weak. 2.—About Dec. 1, we choose a cool day. As our hives are bottomless, we set them on shelves, letting them project of 2 inches. Give ventilation at top, and leave alone till March 15. 3.—Chaff on sides and top, 3 to 6 inches thick. Slots for boxes 1-ft open. 4.—Old style Quinby frame with removable inner part. For box honey, 6 frames; for extractor, 18 frames. 5.—For winter, put the frames on small bottom-board. Put quilt over frames. 6.—For box honey, 7 frames, for extractor, 16 frames. 7.—Those out-doors, caps packed with straw; in cellar, quilts over frames. 8.—A modification of the Langstroth with the Quinby box-hive. 9.—Three half-inch strips on frames, three thickness of carpet over. 10.—Two kinds, the Langstroth and a square hive, 9 to 11 frames, 11 $\frac{1}{2}$ x 12 inches. 11.—One-third are Italians, balance mixed. 12.—Those in house, could fly when they wished. Those out-doors, entrance contracted and kept covered with snow. 1.—Also blossoms.

J. H. NELLIS, Sec'y, North Eastern B. K. Association.

For the American Bee Journal.

An Injustice.

I was quite sorry to see in the Secretary's report of the proceedings of the Michigan State Bee-Keepers' Association, the statement that "the subject of 'Humbugs' brought out many severe criticisms on Mr. A. I. Root's method of doing business, from those present, it being claimed that he had misled more people and had been the cause of more failures than any other person in America." While such criticisms were pronounced, they were by no means the voice of the Convention, and it is but doing justice to Mr. Root and to some "of the members present" to say that there were strong remonstrances against such arraignment.

One may have his likes and dislikes; his opinions and prejudices; he may think another has injured him or his interests, but, in my opinion, it is entirely out of place to bring such personal matters into the discussions of a body like our State Bee-Keepers' Association, and it is equally out of place to introduce them into the report for the columns of the JOURNAL. Though I would not like to have it thought that I wish to lay claim to a knowledge of just how the duties of the officers of such associations should be performed, still I wish to state that I have been accustomed to think that, in the performance of all official work, strict impartiality should be preserved—that, in fact, the ability to pursue such a course should be ranked as one of the first and most essential qualifications for office.

I dislike to write on such a subject because Mr. Burch, the Secretary of the Mich. State B. K. Association, and I, have always been on the most friendly terms. But since the words above quoted appeared in the report of the Convention, without the "other side" of the matter, this explanation was called for.

FRANK BENTON.

[This article was written for the February number, but was unavoidably crowded out.—Ed.]

For the American Bee Journal.

Comb Guides.

Take a Langstroth frame and lay it bottom up on a table before you; take a piece same size as top bar and lay it close by the top of your frame on the table; then take another bar same size and cut it so that it will fit inside of the frame. Place it so that the edge will come to the middle of the frame, less 1-16 of an inch. Press bar No. 2 close against the frame (laying flat on the table), then take bar No. 3 (called top bar) and place it on the frame and bar No. 2 and let the edge come to the middle of top bar of frames, less 1-16 of an inch, nail No. 3 on to No. 2. Have melted wax ready; call No. 2 and 3 nailed together, the mould; wet the mould in soapy water—quite cool. Take the frame in the hand; put the mould on; hold it down with the thumb; elevate one end of the frame, and pour wax on the highest end; raise one end of the frame just so that the wax will run to the other end. The frame should be leaned to one side just to form a triangle gutter, or so that when the wax is poured in, it will stand thus—A. What is wanted is a streak of wax an inch

thick, where it is joined to the top bar, and hanging down from $\frac{1}{4}$ to $\frac{3}{8}$ inch. Make one and perhaps you can describe it better.

The bees will work the wax out and make comb of it, always straight. It does not cost half as much as wooden guides and is as good as a 2-inch strip of comb guide—artificial—while it is one-fourth cheaper and more easily put on. Have put on 600 in 10 hours.

W. B. RUSH.

New Orleans, Mar. 1, 1877.

For the American Bee Journal.

Bee Hives.

MR. EDITOR:—I read your remarks on page 84, March number of the JOURNAL, concerning T. S. Bull's bee-hive. You say that it is not patented and we can criticise as much as we please. Here are a few questions: What is there new about it? What advantage has it over others, almost precisely like it, that have been used for years? What is there about it that is not or has not been patented? I am of the opinion that on some of its features there is still valid patents. The frames are no new thing; that they are hung on the rabbets is not new, and I think that a Vermont man has a patent claim on that part of it; the hanging of the bottom-board at the rear end is not new, and a nuisance any way. There is nothing new about the boxes, honey-board, etc., and in fact I fail to find anything new about it at all.

ONE WHO KNOWS.

For the American Bee Journal.

Dysentery.

HOW TO CURE IT, AND AT THE SAME TIME
TELL WHETHER A HIVE IS QUEEN-
LESS OR NOT.

Bees in this section have had considerable dysentery this winter. Friends Johnston, Waterhouse, and myself have cured ours by giving each swarm some water in little wooden cups, made of maple, by taking $2\frac{1}{2}$ x $2\frac{1}{2}$ x 1 in. cut out with a 2-in. centre-bit. Place one at the entrance of each hive and fill them with water, say once each week, if required. We have had them out of the cellar twice and gave them a good fly, and they are now all right. If we found any of the cups with but little or no water taken out, we took a piece of chalk and marked that stock, QUEENLESS.

The water keeps them quiet; when they are breeding fast, towards spring, they require a large amount of water for the young bees, and when they find it they seem quite contented. These wooden cups are very much cheaper and cleaner than sponges, and I think the bees like them better.

W. G. WALTON.

Hamilton, Ont., Feb. 19, 1877.

For the American Bee Journal.

Chips from Sweet Home.

I have all the comb I want for starters; all I can well use. I watch all new swarms and take out nearly all drone comb. I use the Harbison sections and like them better than anything I ever saw. These sections hold from 2 to $2\frac{1}{2}$ lbs. I shall do but little

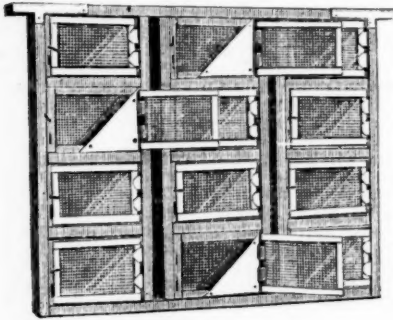
slinging in the busy time. In the fall I shall sling out more or less, depending upon price of either. Slung honey I sell at home—last season at 15c.; box honey, 20c. At those prices slung honey pays best, and so far I have had no trouble to dispose of all, although a good deal was traded for articles that I would otherwise have paid cash for. We are having a warm spell of weather for this month, from 30 to 50 deg. All bees in cellar, except 7, appear right—no disease. J. H. Thomas, of Brooklin, Canada, invented and patented a bee-house, similar to those much-talked-of now, 15 years ago; so the house apiary is not a new thing.

D. D. PALMER.

For the American Bee Journal.

How to Italianize Blacks, Introduce Queens, and make New Colonies.

MR. EDITOR:—Permit me to call the attention of your readers to the utility of the queen nursery in making the above changes in converting black bees into colonies of Italians. This we do by the use of the queen nursery, in the following manner:—Put into the cages of the nursery, between the tins, a few cells of sealed honey, in new comb if possible. Then cut from the combs of a pure Italian stock as many queen cells, large, and well developed, as you have prepared cages with the honey, as above. Suspend one of the cells in each of the cages.



QUEEN CAGES.

Good care should be taken to have the best cells, and not injured by bruising, handling or jarring. Having thus supplied each cage of the nursery with a queen cell and feed. The feed is thus supplied so the young queens will not starve if the bees do not feed them—a thing they often fail to do when there is a scarcity of honey in the flowers. The nursery cages so prepared are adjusted in the nursery frame. Then having removed a centre comb from a strong black colony, we place the queen nursery into the vacancy made by the removal of the comb, there to remain until the queens are hatched, which will be in 3 or 4 days, if the cells were not cut from the combs too early, or before the 9th day.

When the queens emerge from the cells, each cage containing a virgin queen is removed from the nursery frame and placed in one of the adjacent combs of the same colony, on either side of the nursery. The

cages are so placed in the combs by cutting out a piece among the brood just large enough to receive a cage in each. Now go to other colonies of black bees, and take out two combs filled with brood and honey, brushing off the bees back into their own hive, place them in a new hive far enough apart to receive another between them; open the nursery hive and lift out one of the combs with cage and virgin queen and all the adhering bees, and place it in the new hive, between the two combs thus prepared to receive it, immediately closing up this new hive. And so proceed until you have made as many new colonies as you have virgin queens in the cages. On the next day, near sundown, open the hives and liberate the queens. Before doing this, you can, however, spray the bees and queens with perfumed sweetened water, so that the bees will have something to do while their ladyships are going at liberty among them, but we deem this seldom necessary, except at times when the bees are not gathering honey liberally, and are cross.

These new colonies are built up into full strong ones by adding combs of brood from the black colonies, always brushing off the bees back into the old stands, so no strange bees will be added to the new ones, except the hatching brood, and these will not interfere with the queens. By the above it will be noticed that the virgin queens are not placed in jeopardy among strange bees, but are set at liberty among those with whom they are hatched, and being of the same scent are kindly treated. It should be noted that you must be careful never to introduce an old queen into the new colonies among the bees on the combs containing the caged virgin queens, or they may be killed when set at liberty. It should be further noted that the addition of brood combs are better made after the young queens are fertilized.

By so using the queen nursery the loss of many queens is avoided and many queen cells saved from destruction, and an apiary of black bees Italianized. The cages can be removed from the new colonies within two days after the queens are liberated from them. Notice while removing the cages that the queens are all safe.

Another plan is to liberate one virgin queen after another from the cages, as the one preceeding is fertilized and removed from the hive, until all are fertilized and introduced into new colonies. This plan requires more attention, and from my own experience I choose the first plan. It does not require the queens to be confined so long.

JEWELL DAVIS.

Charleston, Ill., March, 1877.

For the American Bee Journal.

Life Insurance.

I am in favor of the insurance scheme, spoken of by Brother Wm. J. Andrews. I am in favor of insurance, and especially when so small a sum will assist the heirs of a member to so large an amount, as mentioned by Mr. Andrews. I took a life policy at the age of 27 years; it has cost me \$104.05; I am 34 years of age; dividends make it a little less than \$80 now. I consider that I have so much actually laid up in case of my death, which will certainly

occur; and the company is good. We can have one as good for less money.

WM. P. EVERITT.

Davis, Mich., Jan. 9, 1877.

For the American Bee Journal.

Pres. Bacon's Address

TO THE N. E. B. K. ASSOCIATION AT SYRACUSE, N. Y., FEB. 7, 1877.

Fellow bee-keepers:—I came to-day with no other object in view than to fill the position you assigned me (so far as I am able), and to extend the right hand of fellowship to those who are endeavoring to make this Association a success. This is our eighth convention, and I believe I have been present at every meeting, save two, since the organization, and in every case I went away feeling I had made poor returns for the benefits I had received. It was a surprise to me to have the honor of being your president, when there are so many connected with this Association more worthy and better qualified to preside over your deliberations. I am interested in these gatherings, they have been profitable to me, and it is always a pleasure to me to meet with this Association.

Another season of care and labor has passed away since last we met, and I trust not without its lessons of knowledge and profit to us. I think we have great reason to be thankful to the great Giver of all things for his kind care over us during the past year. So far as I know, no calamity has come to any of us, and none of our number have been cut down by death. Now, I trust, we have come together to compare our past experience and to aid each other in making bee-culture more successful in the future. To this end, I trust we shall avoid, so far as possible, saying anything that will mar the harmony of our deliberations. I judge from our past gatherings we shall have a harmonious meeting.

The honey bee has been admired for its works in all ages, and me thinks when Adam named this insect he judged it to be one of the fine works of God, and a wonder and blessing to man. Many a pen has been employed in portraying its peculiarities, and yet the theme is not exhausted. Its natural habitation is found in the rocks, the forest trees and even in the lion's carcass. It thrives in artificial dwellings, and thus it becomes more subservient to the will of man. Unlike other insects which work to destroy and leave desolation in their track, the honey bee is a source of revenue. It not only fructifies the flowers of the field and causes them to yield their fruit, but its production is the finest food for man. This sweet nectar is not only found on the poor man's table in the lonely cottage, but on the king's table in the palace.

Perhaps the strength of this interest can best be given in figures. In 1850 the amount of honey and wax reported in the census returns was 14,153,790 lbs.; in 1860, 23,366,457 lbs. of honey and 1,322,787 lbs. of wax. New York stood at the head of this list, with 2,360,751 lbs., and 9 other States are credited with more than one million pounds each, in the following order: North Carolina, 2,055,969; Kentucky, 1,768,692;

Missouri, 1,585,983; Tennessee, 1,519,390; Ohio, 1,459,601; Virginia, 1,421,591; Pennsylvania, 1,402,128; Illinois, 1,346,803; Indiana, 1,234,498. In 1868 circulars were sent to known apiarians in nearly every State, and returns were received from 489 counties, in 32 States, and the lowest estimate that could be made by those returns, gave two millions of stocks. Estimating the total number of hives at two millions and the surplus honey at only 15 lbs. per hive—which is but two-thirds of the average report—the value of honey at that time, annually produced, at 25 cts. per lb., would be \$7,500,000, and the estimated value of honey in 1870 was \$15,000,000. Since the above reports great destruction came to bees, and we think we are safe in saying up to last year their numbers have greatly fallen off, yet by the improvements made in bee-culture, the yield of honey has been larger than ever before, and still there is room for great improvements.

Were a rational system of bee-keeping in general use, this branch of industry would take rank with other branches of agriculture which are considered indispensable. Patent bee palaces, moth traps, self-actors, and many other so-called bee hives, should altogether be discarded as being of no benefit to bee-culture. Perhaps there are some present who are ready to ask if I would discard all patent hives? I answer no; not any sooner than patent plows, mowing machines or sewing machines. I believe if a plow can be made better, so can a hive, and the man that will improve them let him have his reward. The first plow was not what the plow of to-day is, and among them it is very easy to find good, better, best; and so it is with thousands of hives that are now patented. There is no good reason to discard a good plow because there are many poor ones, nor a good hive because there may be 49 out of 50 that are worthless. We should hold fast to that which is good and throw away the bad. Improvements come by degrees, and the man that adds one degree to this great storehouse of knowledge is a benefactor to his race.

The knowledge and practice of a good system of bee-keeping is very essential to success. To know how to raise apiarian products in a neat, attractive manner is also of prime importance. But there is something beyond all this which not unfrequently depresses and tends to paralyze all our best endeavors in apicultural management. I refer to a loose and unskilled manner of marketing bee products.

Our constitution provides for one annual meeting in convention, when it is hoped all those who are interested in bee-culture within the bounds of this association will be represented, and take such action as shall be desirable for the better promotion of the bee-keepers' interest, and when in convention is it not eminently right and proper to mature some plan for associated action that will secure a fair price for our product? We have seen what wonderful results have been accomplished by associated action and by a combination of interests. The greatest enterprises of to-day, which are so astounding in their magnitude are the result of associated efforts, and these are tending to revolutionize the business operations of the world. We have seen what wonderful results have been accomplished by the associated system of dairy-

ing. We presume there are men living to-day who remember the time when American dairying was confined mostly to one county of this State, and but a few thousand pounds was the result of their annual labors. Cheese was slow of sale and dairymen talked then as some bee men at the present time do, that any addition to their production would cause its ruin; and when the business began to spread over adjoining counties fear came over many that were engaged in that branch of industry. They felt that their products would become worthless and their occupation would be gone. But time proved their fears groundless; as the dairy products augmented the consumption increased, and this branch of industry has continued to grow until millions of pounds have taken the place of thousands. Associated system has had much to do with this result.

What unity of action has done for dairying and other branches of industry, it may also do for apiculture. It is beginning to be understood that association and unity of action are the great main springs of power and progress in the world. The bee-keepers of this country are not fully awake to this principle in marketing their products. They have proceeded upon the plan of individual action, and often through inexperienced salesmen the market becomes impaired and a loss to bee men is the result. I am glad to hear the sound of reform in this direction coming over the plains from California, and may an echo return sounding the glad news to our brother bee-keepers in California, that the East is also waking up to this subject.

I take the following extract from a committee report on selling honey. It says:—"We are advised by San Francisco dealers that producers are very much to blame in our present demoralized market in this city, by ordering forced sales while it is out of season for its sale, and also by sending to parties who, by inexperience are not informed as to this fact, and have consequently sacrificed their consignment."

Our local home market has been affected in a similar way to that of San Francisco, and all of these will act and react so that our eastern markets will be affected in like manner, according to the well-known laws of trade. This report tells us that the California honey market has become demoralized by inexperienced salesmen, etc., and fears are entertained that the eastern markets may become so, too. Is not this the case, to a certain extent, already? We earnestly hope that the bee-keepers of this country will wake up to this matter and prevent, if possible, further injury.

I venture here to present another subject which I deem injurious to our interest as bee-keepers, and that is the wholesale publication of reports of large yields of honey from single stocks or apiaries, without stating the condition of the bees, and how they were managed. It is not in many cases with these large reports, as with the case of a mammoth ox, made by a freak of nature aided by the care and skill of man regardless of expense? And do not such instances occur only once in an age? In other cases, and more often than in the former, are not such reports made by operating against nature, that is, by combining a number of swarms and in that way making them mammoth in size, and are not these large

yields of honey the result? All this is well enough if the facts go with the report. But is it not more often the case that these mammoth reports are only on paper for notoriety and to have it go out that they are in advance of their neighbor bee-keepers. Such reports are to be deplored, and every honest bee-keeper should rebuke them. If this matter ended with the publications, the effect would not be so injurious. But we regret that this is not the case. We think in not less than three ways are bee-keepers injured by these reports:

1st. Many people who read these reports, believe them to be untrue, or in other words, "fish stories," and thereby the veracity of bee men comes to be questioned, and I ask what is a man in any business or calling without character? Is it not generally the case when a part of any profession is assailed for lack of honesty that it casts a shadow over the whole fraternity?

2d. It induces some people to start in bee-keeping with the expectation of large yields of honey, which will soon give them wealth, but when it is too late they wake up to find they were deceived, and then curse the bee fraternity for their failure and loss.

3d. Honey buyers keep their eyes upon all reports that have to do with the amount of honey produced in the country, and from these reports they fix the price to be paid, and when you go to dispose of this article, said reports are showed you, and if you are equal to the task of meeting them, you may carry your case to success. If not, you will suffer loss; the result is an injured market.

I would like to say more on this subject, but I have already taken too much of your time. I will only add, the old maxim, "honesty is the best policy." It is just as true to-day as ever, and is as applicable to bee-keepers as to any other class of men. Having an honorable employment let us ever prove ourselves an honor thereunto.

The Purity of the Italian Bee.

READ BEFORE THE NORTH EASTERN B. K. ASSOCIATION, FEB. 8, 1877.

Have we a standard by which the purity of the Italian bee can be gauged? Our old teachers in apiculture, such as Langstroth, Quinby, Dzierzon, Berlepsch and many other veterans, taught that there were marks by which the pure type of this bee could be known from the impure. These marks were confined to the abdomen, and consisted of three bands or rings varying in color, in bees of different progeny, from a dark leather to a bright yellow orange. The first band is near the thorax, and quite narrow; the second or middle band is the widest, while the third is narrow, and sometimes indistinct, except when the abdomen is distended with honey, when it can be plainly seen. If the bee is held by the thorax with the thumb and forefinger, it will, in its efforts to get free, distend the abdomen and show this third band. These bands can also be plainly seen when the bee is placed before a window. These instructors also taught that the entire worker progeny of the queen must show these three bands in a greater or less degree of conspicuity. If such was not the case, then the queen herself was either impure or impurely mated.

But since these solons in bee-investigation have ceased to let their light shine, a new set of lights, of far less magnitude, have ignored the above standard of purity, and now teach us that these rings can not be depended on as a criterion; that when some of the worker progeny of the queen are black bees, it does not at all invalidate the purity of the queen—she may be a pure Italian and purely mated with a pure Italian drone for all that. Now this, when placed by the side of our “standard,” seems rather paradoxical. According to one phase of the question it is true, and to another it is false. Upon the assumption that all the bees in Italy are of one type, one class, one variety, it is true; but if we come down to facts, that were even cognizant to all the old Latin writers upon the bee, such as Virgil, that the bees in Italy are not all of the same variety, then the theory of purity so advanced by our modern bee-lights is false.

HISTORY OF THE MARKS.

All impartial writers and travelers tell us that there are two kinds of bees in Italy; that the bees in the northern portion of that country have the markings much more distinct than those in the southern part. Spinola, who wrote a treatise on bees in 1805, found two kinds of bees in Piedmont, though the common bee was less frequent there than the pure Italian, the peculiarities of which he describes, and terms it the Ligurian, a name by which it is now known in Europe. Varro and Columella also speak of two varieties. Kleine, a German apiculturist and writer of distinction, when speaking of the Ligurian bee, says: “At this day both varieties are met with in various parts of Italy. Mr. Deus, of Dusseldorf, found the orange-colored bees at Genoa and the black in Nizza.” Capt. Balenstein, when a soldier in the Napoleonic war, found the Ligurian, or pure type of the Italian bee, in the Lombardo-Venetian province, and near Lake Como, which he described in the *Bienenzeitung* in 1848. But even in these provinces the bees are mixed.

In October, 1875, I received an invoice of queens from Sig. Sartori, of Milano, Italy, and among the lot was a very fine dark leather-colored queen that produced progeny badly mixed. At least one-tenth of her worker progeny were as black as any natives to the “manor born.” They had no signs of the bands that characterize the pure type. Now there was no mistaking; for, as she was a fine looking queen, I had great anxiety to know how she was conducting herself, and so examined the hive every few days (no interim longer than five days) to report progress. There was no superseding—no getting round the difficulty upon any such pretext. I wrote my correspondent to send me no more such queens. Now this queen was undoubtedly a pure Italian if the fact of her coming from Italy could make her such; but according to our standard of purity she was nothing but a mongrel hybrid. Had I purchased her for an imported queen from any dealer outside of Italy, I should have concluded he had imposed a queen upon me that had never seen balmy Italy. I never charged this Italian seller with dishonesty, but only blamed him for his carelessness. The most of Italian queen breeders do not rear all their queens, but purchase them from the country people; and as bee-keeping among the Italian peasantry is conducted in the

most careless and slovenly manner, very little attention is paid to selection.

PURITY ESSENTIAL.

The Italian bee is not a distinct species as many suppose, but only a variety. The probable origin of it I will not discuss. Since Capt. Balenstein first called attention to the pure type of this bee, it has undoubtedly been the means of shedding more light upon the mysterious wonders of bee life than all other agencies heretofore applied. Of its superior qualities over the ordinary bee I will not speak, for they are already well known. But in order to reap the full benefit of this variety of the honey bee, it is necessary to keep it up to the full standard of purity. Then it is an easy matter to control the crosses with the blacks, if such mixtures are more desirable for honey gatherers. Why does the stock breeder desire his pure breeds? He knows that if grades are desirable, they cannot successfully be made unless he starts with pure blood. The same principles apply to the honey bee, although the cases are not exactly parallel. If hybrid bees are desirable, then why not make the crosses ourselves. These observations and suggestions are offered for the consideration of bee-keepers who desire to see the interests of apiculture promoted; for just in proportion as we develop this industry do we add to the wealth of our country.

J. H. P. BROWN.

California B. K. Association.

The San Diego Bee-Keepers' Association organized on Thursday, Feb. 1. After the reading of the reports, Mr. J. S. Harbison expressed his views at length, and in a very interesting manner. The points that were discussed were: The size and weight of packing cases; the proper tare to be allowed, and the kind of lumber to be used; the distribution of bees so as not to overcrowd the ranges; the number of grades to be used for making honey for shipment; and the necessity for properly instructing bee-keepers on these points. A motion was carried authorizing the directors to prepare a circular, giving information on important points; have copies printed and distributed to members, requesting them to post the same in their bee-houses and give attention to them.

Board of directors for the present year:—E. W. Morse, R. G. Balcom, J. G. Frazier, F. Ritzke, E. J. Rhodes, C. J. Fox, A. P. Herrick, L. Saunder, R. Rea.

The directors organized by electing for president, Chas. J. Fox; for vice-president, E. W. Morse, and for sec'y and treas., R. G. Balcom.

The president, E. W. Morse, in his report stated that he had issued and signed 2,860 grade certificates. He had corresponded extensively with a view to extend their market for honey and beeswax. Comb-honey had been successfully shipped to Scotland. If comb honey could be as safely shipped as extracted, European markets would take all of our surplus of both kinds. He then added:

In correspondence with parties in Mexico and Central America, I was told that those countries produced enough honey for their own consumption, but imported considerable quantities of beeswax, and this singular fact was shown; that the merchants residing on the Pacific coast of those coun-

tries purchased beeswax in St. Louis, shipped it by rail to San Francisco and then by steamer to destination, which shows the circuitous routes the currents of trade will sometimes take. My correspondents informed me that they paid in St. Louis 50c. per lb. And yet the same identical pound of wax could have been purchased in San Diego for less than 30c., saving the cost of a 3000 mile trip to St. Louis and back. These things, in time, will regulate themselves, and the advantage of an organization is, that we can greatly hasten the time to our own advantage. I believe our organization is proving itself to be a success; it has been but 7 months in existence, and the reports of the secretary and of Mr. Fox, our most efficient agent and vice-president, will show results which could not possibly have been obtained by the members in their individual capacity.

Our great need now is cheaper transportation. Could the exorbitant charges we now pay for freight to the East be reduced to a fair rate, our bee-keepers would enter upon a season of great prosperity. We hope, by an organized effort, some reduction may be made. As our organization becomes older and better known it will have more influence abroad and become more valuable to ourselves. Honey, with our "grade certificates" upon it, will be in greater demand and bring better prices, and though now in its infancy it is only a small institution, yet I look forward to its becoming of great importance, not only to its own members but to the business interests of San Diego County.

The directors reported that they obtained a good brick building as a warehouse, employed an experienced man as grader, made contracts for drayage, etc., had prepared printed certificates of grades to be affixed to cases of honey, and made arrangements with the steamship company for careful transportation, and other minor details. Under these arrangements they have during the past six months received, stored, and graded as follows:

Cases of comb honey	1433½
Cases extracted	13
Barrels extracted	21

They have shipped as follows:

Cases of comb honey	1058½
Cases extracted	13
Barrels extracted	21

Total	1002½
Leaving in warehouse at date of Feb. 1. 375	

To St. Louis and Cincinnati, 1 car load each; to St. Paul and Boston, ½ car load each. All had been received and acknowledged, but no returns had yet been made.

C. J. Fox, their special agent, reported as follows:

The honey business of Southern California, though of very recent origin, has grown to large proportions. San Diego county alone produced in 1877 about 1,250,000 lbs., four-fifths of which was shipped in the comb and one-fifth extracted. Our facilities for raising honey and increasing our stock of bees are the best in the world. Throughout our honey range, which extends back from the coast to the high mountains, a distance varying from 40 to 100 miles, ice and snow are unknown, while frost occurs so seldom as to be very little regarded. During 8 or 9 months of the year no rain falls, no hail or thunder storms interfere with the breeding or working of the bees, and there

are not more than 2 or 3 months when they have any difficulty in providing for themselves. The season for the production of surplus honey lasts from 4 to 6 months, during which there is an almost constant succession of wild honey-producing plants or shrubs, and there is probably no other place in the world where honey is gathered so rapidly as it is here while white sage is in bloom. We do not need to plant clover or buckwheat or mignonnette, for white sage and other indigenous plants produce honey as white and of as fine flavor; we do not need to build houses and warm them or put in cellars to protect them from the winter cold, for while our Eastern friends are contriving how to save their colonies through the long period of ice and snow, our bees are flying abroad providing for themselves. Under these circumstances it would seem that the business here should be more profitable and make a better return for capital and labor than anywhere else. But there are some drawbacks as there are in every business, and it is for the purpose of meeting and overcoming the difficulties of our position that our Association was formed and that I am now addressing you. The problem of how to raise honey in large quantities has been solved, mainly by the indomitable energy, perseverance and skill of our townsman, Mr. Harbison, to whom we are indebted for the first commencement and most of the methods at present in use among us.

The first question in regard to any article of commerce is how to produce it, the second is how to transport it, and the third is how to dispose of it profitably. As I said, the first is practically solved among us. Improvements can yet be made, no doubt; economy of labor and increased production may be attained, but we can already produce an amount much larger on the average than any where else we know of. The second question, transportation, has been only imperfectly solved, and much yet remains to be done. Several difficulties stand in our way. One is careless handling and too many reshipments; another, high rates of freight and irresponsibility of railroads and shipping agents. During a trip of 3 months East the past season, and while acting as agent of our Association, I made efforts to meet some of these difficulties. I found the owners of the steamship line from San Diego to San Francisco willing to do everything in their power. They issued orders to their employees to handle comb-honey with care, to have it all carried by hand on and off the steamers, and to see that it was not thrown down or roughly treated. Since these orders were issued we have had but little to complain of in this respect. When a consignment of honey reaches San Francisco it is very important that it should be received and cared for by some one who thoroughly understands the importance of care in handling. To secure this I made an arrangement with a very thorough and careful business man, Mr. R. Dixon, who, as soon as he received advices of shipment and destination of a consignment, made arrangements with the C. P. R. for a car; as soon as the steamer was discharged, had the honey carefully conveyed on spring wagons and loaded in the car under his own supervision; and so well has he done this that all he has shipped has reached its destination in as good condition

as was received in San Francisco. A great deal of difficulty is encountered by the way the C. P. R. R. do business. Though they understand thoroughly the very great damage certain to occur to a car load of honey by its being transferred from one car to another *en route*, they will not guarantee its thorough shipment, as they do with fruit. They will not afford any warehouse room, even for a night; the honey must be taken from the wharf the day it is unloaded, and must be loaded into a car standing on a side track as it is hauled. If they do not happen to have a car ready and belonging to the city where the honey is destined to go, the shipper must store it somewhere, and rehaul it, or run the risk of its being ruined by transferring from one car to another. The rates of freight are exorbitantly high, a car load of wool, for instance, being transported to N. Y. for about one-half the charge on a car load of honey. These difficulties should be met in some way, either by a more favorable arrangement with the R. R. Co., or by procuring warehouse facilities near the railroad or steamship company's wharf.

Possibly, if our Association does a larger business in forwarding honey, we may obtain more consideration. The style of packing honey in the cars, invented by Mr. Harbison and used by our agent, is an excellent and safe one. We have a further difficulty to contend with in the unloading and transporting of our honey at its destination, and to guard against injury there, I took pains to fully impress upon all commission men, and others to whom we might ship, the importance of very careful handling. In fact the liability of comb honey to injury in transporting it any distance is one of our greatest difficulties, and is a strong argument in regard to what I will refer to further on, i.e. the advisability of fostering a market for extracted honey. These are some of the difficulties attending the shipping of our product, and most of them can be lessened by co-operation among ourselves, for by concentration of business we obtain respect and consideration.

The next and most important consideration is to sell our honey at a good price. This was not difficult when the amount produced was small, but now that it is so large and rapidly increasing it is very important to extend our markets, to put it for sale where it is not known, and to procure, as customers, people who can appreciate a good and pure article.

Formerly, every farmer through the country made a few cheeses. These were traded to country dealers, and by them to wholesale dealers, but there was no system or uniformity. Now, great factories make cheese in immense quantities, of a uniform size and quality, and supply foreign and home markets. A few years ago farmers kept a few hives of bees. Honey in all qualities and conditions was sold or traded to country dealers, and collected by wholesale dealers, without order or system. It is only very lately that men have engaged exclusively in producing honey in large quantities, probably no other man in the world having raised in one year as much as Mr. Harbison, of our county, his crop the past year approximating 100 tons. It now becomes necessary to do, as was done in the cheese trade—extend our markets.

Another evil has attended our sales the

past year. Through want of co-operation, our producers have shipped in small quantities to persons who did not understand the trade. They have handled it carelessly, competed unnecessarily with one another, crowded it on an unwilling market, and in various ways lowered the price. A far better way is to employ a good, reliable agent to sell on commission in each large city, with the understanding that he shall supply the market in that place, and so avoid injurious competition. I made it my business the past fall to find such men, and have made arrangements with one in each of the large cities, for whose ability and integrity I have ample guarantees.

The system adopted by our Association of careful repacking, grading, and marking with reliable certificates, meets with favor and appreciation among dealers, who will be able, as soon as our system is understood, to sell by sample, saving the time and injury to the honey by opening every case for inspection.

It is unquestionable that good extracted honey is the purest and best form in which it can be eaten, and when the public can become convinced that extracted honey shipped from here is a pure article, it will be preferred to comb honey. The honey we ship is perfectly pure, it can be raised here at a less price than it could be manufactured for. On each package of comb honey the tare is 14 lbs., as at present calculated, or, at 3c. per lb freight, 42c. per box of about 56 lbs. net of honey, or over 4-5 of a cent per lb dead loss. On a cask holding 20 gall. the tare is 20 lbs., at 3c. per lb is 50c., or about 1-5c. per lb on 280 lbs. net of honey; so that on each net ton of comb honey shipped we pay \$12 more freight than on a ton of extracted honey. It is the testimony of those who have tried it, that fully double the amount of honey can be made from the same number of bees, by the use of the extractor. This, combined with the saving in freight, shipping boxes, breakage of comb, etc., will enable us to put extracted honey on the market at a much less price than comb honey, and realize for ourselves as good a return for our labor. It is the experience of the world that cheapening the price of any article increases the demand, and if we can get our extracted honey before the public all over the world, on its merits as a good and pure article, at a price much lower than comb honey has hitherto sold, we shall have no difficulty in disposing of all we can raise.

I would urge upon all interested in apiarian pursuits, the necessity of co-operation; intelligent efforts at improvement in producing and shipping our product economically; honest and fair dealing; and that hearty and cordial mutual assistance so much needed at the commencement of a new enterprise. Rely upon it that narrow-minded jealousy and unnecessary competition will injure us each and all, while cordial co-operation will relieve our present depressed condition and make the production of honey one of the most profitable occupations in which we can engage, while populating and rendering useful large areas of country otherwise barren and unsettled.

CHAS. J. FOX.

Subscribers will please notice the date upon their subscription labels and see that they are "up with the times."

Foreign Notes.

WHAT OUR FRIENDS ACROSS THE WATER SAY CONCERNING THE DIFFERENT RACES OF BEES.

G. Dathe, Eystrup, Hanover, says in his circular and price-list for 1877: "I do not raise Cyprian, Egyptian, or Krainer bees any more," but he does not tell why. Mr. Dathe, who is one of the most prominent bee-keepers of Germany and author of valuable works on bee-culture, possesses three large apiaries. His home apiary, consisting, in summer, of about 400 colonies and 200 queen hives, is devoted largely to queen-rearing, and his aim is to raise only "Italian queens of the purest full-blood, which produce the most beautiful bees and queens." It is well to see what men of his experience say of the various races of bees.

At the 21st Wanderversammlung of the German and Austrian bee-culturists held at Breslau, last Sept., W. Guenther, of Gippersleben, Hanover, asked: "What has been the experience during the past years in reference to the various imported races of bees?" Quite a discussion ensued, which *Der Schlesische Imker*, published at Troppau, Silesia, sums up as follows: "From the various experiments made during the past years it appears that, as regards diligence and prolificness, the Egyptian bee ranks after the German and Italian; that the Krainer race, at the expense of honey, produces many bees; the Cyprians are diligent, but quite inclined to sting; between the German and heath bees there is no particular difference; in poor seasons for honey the Italians gather more than the German bees. The Herzegovinian bee is praised. Bees obtained by judicious crossing have the preference over the pure races."

In an article entitled, "Die Bienenzucht in Boehmen,"—Bee-Culture in Bohemia—which Rudolf Mayerhoeffler, of Prague—the editor of Bohemia's bee journal, *Der Bienenvater*—contributes to an Alsatian bee journal, is the following: "The Italian bee was praised likewise, as in Germany, as *non plus ultra*, and it was believed that the golden time of bee-culture had come upon us. Now all is still; attention is turned to the Krainer bees, and, more recently, to the Cyprians."

Here is Dzierzon—the man whom the Germans honor with the title "Gross-meister" (great master)—after 25 years' experience with Italian bees, saying: "In Feb. of this year it will be a quarter of a century since the first Italian bees (from Mira, near Venice) arrived safely in Carlsmarkt. The importation of the Italian bee to Germany can rightfully be noted as a real event in the history of bee-culture; not less worthy of note, however, is the fact that during a quarter of a century it has been possible to preserve it pure and unmixed. Thus has it been proved that this as beautiful as gentle, diligent, and prolific bee bears our German climate very well, and that its preservation in purity is, with some care, quite possible, even though made in a measure difficult, on account of the mating of the young queens in the air. * * * The importation of the Italian bee increased directly the profits of bee-culture, because this bee not only

excels the common bee as regards beauty and gentleness, but also in its greater watchfulness and prolificness, and particularly in its greater diligence—superior qualities which the Roman poet Virgil praises as belonging to the golden-colored bees, and have been fully preserved to this time."

During the whole quarter of a century Dr. Dzierzon has bred from the queens first imported and their descendants, having obtained no more Italians. At the various large conventions and exhibitions held in Central Europe, his bees have received the highest prizes as pure and beautiful Italians.

SALICYLIC ACID.

The *Bienenvater*, Prague, Bohemia, says:

This acid is not only a remedy for foul brood, but it also renders us an important service in the preservation of honey. As is well known, newly-extracted honey ferments easily in consequence of its thorough mixture with the air, which contains the fermenting principle; and in order to cause sweet-must to ferment, it is regularly beaten up. Salicylic acid placed in wine-must prevents fermentation for months, as it completely paralyzes the strength of the barm.

FRANK BENTON.

For the American Bee Journal. Honey a Luxury.

At the North Eastern B. K. Meeting held at Syracuse, on the 7th to 9th of Feb., 1877, Mr. J. H. Nellis said:

"We must produce honey cheap enough to compete with other sweets, to make it a commodity of general demand and ready sale. Can bee-keepers do this? If so, there is no limit to the business of honey producing. If not, the business is already overdone."

A very just remark. Honey will ever be eaten as a luxury or kind of "side issue," even at one cent per lb. I have sold rich, choice extracted honey at 11½¢. per lb., by the gallon, for two years past, and urged it upon the market in every way possible, yet ten times as much cane syrup has been sold in the mean time. In the last 10 days more pounds of maple sugar have been sold at 16¢. than of honey at 11½¢. during the past year. Our city uses twice as much comb honey as extracted. They pay 22¢. to 25¢., retail, for comb honey. Honey and heat are antagonistic to each other, and this one fact casts both comb and extracted honey into the narrow sphere of sauce. Sour sauces are much preferred to sweet sauce. Very many prefer all other kinds of sweet sauce to honey. Many people will not eat sauce at their meals at all. Those who imagine they see a broad "rock bottom" only a little way down, just ready to catch any amount of honey everybody can produce, will ere long get the mote out of their eye, and find themselves looking into a chasm without bottom.

What bee-keeper wrote in the *Bee-Keepers' Magazine* that he remembered when brown sugar was worth 25¢. per lb., and honey (strained) 12½¢. per gallon? This is the other extreme, but not impossible, as one will not fill the place of the other. No man can see such great profits in the production as professional supply dealers, who

are charitable enough to sell a hive for 75c., a queen for 90c., and a colony of bees containing the aforesaid, for \$6.50; so that you can get the "worm" while he goes without anything (except the \$6.50).

In my article on page 95, March, 1877, "\$12 worth of honey in glass jars," should read, \$1,200 worth. Also read "Watt's pills," *water pills*.

I shall be on hand at the next National convention, as I have a new patent as well as a potent hive. It is one of those side-door and glass fellows, only that the glass is *blue*. Bees kept in this hive, last season, grew as large as humble bees, and could ravish anything from a red clover head to a gallon jug. All the obstacles yet met with is that they can sting through an inch board, such is their size and vitality. I wish, Mr. Editor, you could get the Chicago honey quotations under blue glass.

JAMES HEDDON.

Dowagiac, Mich., Mar. 5, 1877.

For the American Bee Journal.

Blasted Hopes.

We remember of no occasion that prompted deeper mourning over blasted hopes than we now have in this county. Fully three-fourths of the bees wintering out-of-doors are dead already, and the weather is very unfavorable for the balance. The snow is about 14 in. deep; the thermometer ranging from 6 deg. below zero to 30 deg. above, during last week.

Of 68 in the cellar, I lost one up to Feb. 15. Have not examined since, but am anxiously waiting for warm weather to give them a fly and feed up weak colonies.

We had no surplus honey, except in the basswood season. We had an abundance of white clover and fall flowers, but the cold, wet weather prevented the secretion of honey. The fall found us short in stores, causing a great deal of feeding and uniting of weak colonies. An unfavorable fall was followed by a severe and rigorous winter. On Dec. 8th the thermometer was 12 below zero, and the cold continued till the last of Jan.; when, greatly to the relief of the little pets, they had a nice flight. Feb. was favorable; March, cold and blustering.

As to the cause of the great fatality, there is, as usual, a diversity of opinions; but I believe all agree that poor honey and cold weather will cause dysentery. To an abundant apple crop I attribute one of the main causes. During the cold, wet weather, when flowers were secreting but little honey, the bees were swarming around the cider presses and on the bruised and rotten apples in orchards. The honey gathered after Aug. was never capped. Before cold weather set in they were busily engaged in uncapping all that had been nicely sealed. This uncapping I have been unable to account for. Can you explain? The fatality is general.

A near neighbor who was opposed to the use of the extractor and the beautiful Italian bee, runs his on the old style of "Let alone policy." He extracted no honey, and then, to his utter disgust, his 16 stocks of untampered with, pure blacks all succumbed to dysentery. Now, Mr. Editor, had these 16 colonies of blacks—treated on the "Let alone policy"—all lived through the winter, there would have been no

further use of the extractor and rearing of Italian bees. W. F. WILLIAMS.
Liberty Center, O., March 19, 1877.

American Bee Journal.

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
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 Attention is called to the advertisement of ROPP'S COMMERCIAL CALCULATOR. It is in all respects what is claimed for it, and is a very valuable work.

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Dr. J. P. H. Brown offers as a premium to the person sending the greatest number of subscribers to **THE AMERICAN BEE JOURNAL**, between now and the first of July, a tested queen of imported mother. The queen to be sent upon presentation of certificate from the publisher, certifying to the number of subscribers sent.

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